

G2A11

C. The caller is looking for any station outside their own country

ARRL General Manual: Page 2-2

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A08

B. Say your call sign during a break between transmissions by the other stations

ARRL General Manual: Page 2-2

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B08

D. All of these choices are correct

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B07

C. Follow the voluntary band plan for the operating mode you intend to use

ARRL General Manual: Page 2-2

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B04

B. 150 to 500 Hz

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B01

C. Except during FCC declared emergencies, no one has priority access to frequencies

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B06

A. Send "QRL?" on CW, followed by your call sign; or, if using phone, ask if the frequency is in use, followed by your call sign

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B05

B. Approximately 3 kHz

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B08

A. A portion of the band that should not be used for contacts between stations within the 48 contiguous United States

ARRL General Manual: Page 2-4

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C04

D. "Are you busy?", or "Is this frequency in use?"

ARRL General Manual: Page 2-3

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D09

D. All of these choices are correct

ARRL General Manual: Page 2-5

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D08

D. To help with a reply if the FCC requests information

ARRL General Manual: Page 2-5

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A06

B. Less bandwidth used and greater power efficiency

ARRL General Manual: Page 2-7

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A05

C. Single sideband

ARRL General Manual: Page 2-7

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B03

C. As a common courtesy, move your contact to another frequency

ARRL General Manual: Page 2-7

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A07

B. Only one sideband is transmitted; the other sideband and carrier are suppressed

ARRL General Manual: Page 2-7

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A02

B. Lower sideband

ARRL General Manual: Page 2-8

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A01

A. Upper sideband

ARRL General Manual: Page 2-8

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A04

A. Upper sideband

ARRL General Manual: Page 2-8

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A03

A. Upper sideband

ARRL General Manual: Page 2-8

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C10

B. I am troubled by static

ARRL General Manual: Page 2-9

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A09

D. Current amateur practice is to use lower sideband on these frequency bands

ARRL General Manual: Page 2-8

Ham Academy Lesson: 1A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C07

A. Chirpy or unstable signal

ARRL General Manual: Page 2-11

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2A10

B. It allows "hands free" operation

ARRL General Manual: Page 2-10

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C01

D. Transmitting stations can receive between code characters and elements

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4A10

B. Automatic generation of strings of dots and dashes for CW operation

ARRL General Manual: Page 2-11

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C03

C. Listening only for a specific station or stations

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C02

A. Send slower

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C06

D. Matching your transmit frequency to the frequency of a received signal

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C05

B. The speed at which the CQ was sent

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C09

C. I acknowledge receipt

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C08

C. AR

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B04

A. The communications must directly relate to the immediate safety of human life or protection of property and there must be no other means of communication reasonably available before or at the time of the event

ARRL General Manual: Page 2-13

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2C11

D. I am ready to receive messages

ARRL General Manual: Page 2-12

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B10

D. When the President's War Emergency Powers have been invoked

ARRL General Manual: Page 2-14

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B09

A. Only a person holding an FCC issued amateur operator license

ARRL General Manual: Page 2-13

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B11

A. Whichever frequency has the best chance of communicating the distress message

ARRL General Manual: Page 2-16

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B02

B. Acknowledge the station in distress and determine what assistance may be needed

ARRL General Manual: Page 2-15

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A14

B. Region 2

ARRL General Manual: Page 3-2

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2B12

C. At any time during an actual emergency

ARRL General Manual: Page 2-16

Ham Academy Lesson: 1B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D01

A. Amateur volunteers who are formally enlisted to monitor the airwaves for rules violations

ARRL General Manual: Page 3-2

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B01

C. 200 feet

ARRL General Manual: Page 3-2

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D03

B. Direction finding used to locate stations violating FCC Rules

ARRL General Manual: Page 3-2

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D02

B. To encourage self-regulation and compliance with the rules by radio amateur operators

ARRL General Manual: Page 3-2

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D05

D. An FCC General Class or higher license and VEC accreditation

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D01

A. Any person who can demonstrate that they once held an FCC issued General, Advanced, or Amateur Extra class license that was not revoked by the FCC

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D08

B. The person must hold an FCC granted Amateur Radio license of General Class or above

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D07

C. A Volunteer Examiner Coordinator

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D11

D. The applicant must pass the current element 2 exam

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D10

B. 18 years

ARRL General Manual: Page 3-3

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D04

A. At least three General Class or higher VEs must observe the examination

ARRL General Manual: Page 3-4

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D02

C. Technician only

ARRL General Manual: Page 3-4

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D03

C. On any General or Technician Class band segment

ARRL General Manual: Page 3-6

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D09

C. 365 days

ARRL General Manual: Page 3-4

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E09

C. English only

ARRL General Manual: Page 3-6

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1D06

A. Whenever you operate using General Class frequency privileges

ARRL General Manual: Page 3-6

Ham Academy Lesson: 1C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A07

C. 14305 kHz

ARRL General Manual: Page 3-7

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A05

A. 7.250 MHz

ARRL General Manual: Page 3-7

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A09

C. 21300 kHz

ARRL General Manual: Page 3-7

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A08

C. 3560 kHz

ARRL General Manual: Page 3-7

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A01

C. 160, 60, 30, 17, 12, and 10 meters

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A10

D. All of these choices are correct

ARRL General Manual: Page 3-7

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A03

B. 30 meters

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A02

B. 30 meters

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A06

C. 3900 kHz

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A04

D. 60 meters

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A12

C. Amateur stations are allowed to use the band only if they do not cause harmful interference to primary users

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A11

B. The upper frequency end

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B03

A. Observation of propagation and reception

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1A13

D. Move to a clear frequency or stop transmitting

ARRL General Manual: Page 3-8

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B10

C. 100 watts PEP output

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B02

D. There must be no more than one beacon signal transmitting in the same band from the same station location

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E06

A. The licensee of the uncoordinated repeater has primary responsibility to resolve the interference

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E04

D. All of these choices are correct

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D05

B. When the contact is with amateurs in any country except those whose administrations have notified the ITU that they object to such communications

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E05

C. Only messages relating to Amateur Radio or remarks of a personal character, or messages relating to emergencies or disaster relief

ARRL General Manual: Page 3-9

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B05

D. When it is an incidental part of a manned space craft retransmission

ARRL General Manual: Page 3-10

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E01

A. The third party's amateur license has been revoked and not reinstated

ARRL General Manual: Page 3-10

Ham Academy Lesson: 1D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E08

B. The foreign amateur station must be in a country with which the United States has a third party agreement

ARRL General Manual: Page 3-10

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E07

C. Every foreign country, unless there is a third party agreement in effect with that country

ARRL General Manual: Page 3-10

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B07

B. They may be used if they do not obscure the meaning of a message

ARRL General Manual: Page 3-11

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B06

B. To control a space station

ARRL General Manual: Page 3-11

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1E02

D. Only if the 10-meter repeater control operator holds at least a General Class license

ARRL General Manual: Page 3-12

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B09

A. When other amateurs are being notified of the sale of apparatus normally used in an amateur station and such activity is not done on a regular basis

ARRL General Manual: Page 3-12

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B11

C. In conformance with good engineering and good amateur practice

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D07

A. If you are using other than a dipole antenna, you must keep a record of the gain of your antenna

ARRL General Manual: Page 3-12

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C01

A. 200 watts PEP output

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1B12

A. The FCC

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C06

D. 1500 watts PEP output

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C02

C. 1500 watts PEP output

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C04

A. Only the minimum power necessary to carry out the desired communications should be used

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G2D10

B. Low power transmit operation

ARRL General Manual: Page 3-13

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C03

A. 2.8 kHz

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C05

C. 1500 watts PEP output

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C08

D. 300 baud

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C07

D. 300 baud

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C10

C. 1200 baud

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C09

A. 56 kilobaud

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B03

B. 200 watts

ARRL General Manual: Page 4-2

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G1C11

B. 19.6 kilobaud

ARRL General Manual: Page 3-14

Ham Academy Lesson: 1E

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B05

A. Approximately 61 milliwatts

ARRL General Manual: Page 4-2

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B04

A. 2.4 watts

ARRL General Manual: Page 4-2

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B10

C. 20.5 percent

ARRL General Manual: Page 4-4

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B01

B. Approximately 3 dB

ARRL General Manual: Page 4-4

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B06

B. 100 watts

ARRL General Manual: Page 4-6

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B07

C. The RMS value

ARRL General Manual: Page 4-5

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B12

B. 245 volts

ARRL General Manual: Page 4-6

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B09

B. 12 volts

ARRL General Manual: Page 4-6

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B11

B. 1.00

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B14

B. 625 watts

ARRL General Manual: Page 4-6

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C17

C. 22 nF

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5B13

B. 1060 watts

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7A09

C. Symbol 1

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C18

D. 4.7 F

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7A11

B. Symbol 2

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7A10

D. Symbol 5

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7A13

A. Symbol 7

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7A12

C. Symbol 6

ARRL General Manual: Page 4-7

Ham Academy Lesson: 2A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A17

B. The resistor's inductance could make circuit performance unpredictable

ARRL General Manual: Page 4-9

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A16

C. It will change depending on the resistor's temperature coefficient

ARRL General Manual: Page 4-9

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A14

D. Comparatively low cost

ARRL General Manual: Page 4-11

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A19

C. At right angles to each other

ARRL General Manual: Page 4-10

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G6A18

D. All of these choices are correct

ARRL General Manual: Page 4-11

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G6A15

C. High capacitance for a given volume

ARRL General Manual: Page 4-11

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G6A13

D. All of these choices are correct

ARRL General Manual: Page 4-12

Ham Academy Lesson: 2B

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G5B02

C. It equals the sum of the currents through each branch

ARRL General Manual: Page 4-12

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C13

C. A capacitor in parallel

ARRL General Manual: Page 4-13

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C03

B. A resistor in series

ARRL General Manual: Page 4-13

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C04

C. 33.3 ohms

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C14

D. An inductor in series

ARRL General Manual: Page 4-13

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C10

C. 3.3 millihenrys

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C09

C. 33.3 microfarads

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C12

B. 14.3 microfarads

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C11

C. 70 millihenrys

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C01

C. Mutual inductance

ARRL General Manual: Page 4-15

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C15

A. 5.9 ohms

ARRL General Manual: Page 4-14

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5C08

D. 10.750 nanofarads

ARRL General Manual: Page 4-15

Ham Academy Lesson: 2B

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Emergency Amateur Radio Club - www.earchi.org/education

G5C05

C. 150 ohms

ARRL General Manual: Page 4-15

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C02

A. The secondary voltage becomes 4 times the primary voltage

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5C16

B. To accommodate the higher current of the primary

ARRL General Manual: Page 4-15

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5A02

B. Opposition to the flow of alternating current caused by capacitance or inductance

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5C06

C. 26.7 volts

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2B

General Class Questions valid thru 06-30-2019
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G5A04

C. Reactance

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5A03

D. Reactance

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5A06

A. As the frequency of the applied AC increases, the reactance decreases

ARRL General Manual: Page 4-17

Ham Academy Lesson: 2C

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G5A09

B. Ohm

ARRL General Manual: Page 4-16

Ham Academy Lesson: 2C

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G5A05

D. As the frequency of the applied AC increases, the reactance increases

ARRL General Manual: Page 4-18

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G5A01

C. The opposition to the flow of current in an AC circuit

ARRL General Manual: Page 4-18

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5A07

D. The source can deliver maximum power to the load

ARRL General Manual: Page 4-19

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5A10

B. Ohm

ARRL General Manual: Page 4-18

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5A11

A. Insert an LC network between the two circuits

ARRL General Manual: Page 4-19

Ham Academy Lesson: 2C

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G5A08

A. So the source can deliver maximum power to the load

ARRL General Manual: Page 4-19

Ham Academy Lesson: 2C

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G5A12

B. To maximize the transfer of power

ARRL General Manual: Page 4-20

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G5C07

A. 12.2 to 1

ARRL General Manual: Page 4-19

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G6A03

B. 0.3 volts

ARRL General Manual: Page 4-20

Ham Academy Lesson: 2C

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G5A13

D. All of these choices are correct

ARRL General Manual: Page 4-20

Ham Academy Lesson: 2C

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G6A06

A. Lower capacitance

ARRL General Manual: Page 4-21

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G6A05

C. 0.7 volts

ARRL General Manual: Page 4-20

Ham Academy Lesson: 2C

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G6A08

D. To avoid shorting the collector or drain voltage to ground

ARRL General Manual: Page 4-23

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G6A09

B. The gate is separated from the channel with a thin insulating layer

ARRL General Manual: Page 4-22

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
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G6A10

A. Control grid

ARRL General Manual: Page 4-23

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6A07

A. Its saturation and cutoff regions

ARRL General Manual: Page 4-23

Ham Academy Lesson: 2C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A12

A. To reduce grid-to-plate capacitance

ARRL General Manual: Page 4-23

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6A11

B. A field effect transistor

ARRL General Manual: Page 4-23

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B03

A. Low power consumption

ARRL General Manual: Page 4-24

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6B01

D. Linear voltage regulator

ARRL General Manual: Page 4-24

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7B02

A. Binary "ones" and "zeros" are easy to represent by an "on" or "off" state

ARRL General Manual: Page 4-24

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B06

D. Analog

ARRL General Manual: Page 4-24

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7B04

C. Output is low when either or both inputs are high

ARRL General Manual: Page 4-25

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7B03

B. Output is high only when both inputs are high

ARRL General Manual: Page 4-25

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B11

B. A computer on a single integrated circuit

ARRL General Manual: Page 4-26

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B02

B. Monolithic Microwave Integrated Circuit

ARRL General Manual: Page 4-26

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7B05

C. 8

ARRL General Manual: Page 4-26

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7B01

A. Microcontroller

ARRL General Manual: Page 4-26

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B04

B. Read Only Memory

ARRL General Manual: Page 4-27

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7B06

A. A clocked array of circuits that passes data in steps along the array

ARRL General Manual: Page 4-26

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B10

A. Computer and transceiver

ARRL General Manual: Page 4-27

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6B05

C. The stored information is maintained even if power is removed

ARRL General Manual: Page 4-27

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G6B08

D. Forward Biased

ARRL General Manual: Page 4-28

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G6B07

D. All of these choices are correct

ARRL General Manual: Page 4-28

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7A05

B. 180 degrees

ARRL General Manual: Page 4-28

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G6B09

A. It requires ambient or back lighting

ARRL General Manual: Page 4-28

Ham Academy Lesson: 2D

General Class Questions valid thru 06-30-2019
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G7A07

A. A series of DC pulses at twice the frequency of the AC input

ARRL General Manual: Page 4-29

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A06

D. 360 degrees

ARRL General Manual: Page 4-29

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A03

D. Equal to the normal peak output voltage of the power supply

ARRL General Manual: Page 4-30

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A02

D. Capacitors and inductors

ARRL General Manual: Page 4-30

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A01

B. It ensures that the filter capacitors are discharged when power is removed

ARRL General Manual: Page 4-31

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A04

D. Two times the normal peak output voltage of the power supply

ARRL General Manual: Page 4-30

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G7A08

C. High frequency operation allows the use of smaller components

ARRL General Manual: Page 4-32

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G6A01

C. 10.5 volts

ARRL General Manual: Page 4-32

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G4E09

B. 0.5 VDC

ARRL General Manual: Page 4-33

Ham Academy Lesson: 2E

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G4E08

A. Photovoltaic conversion

ARRL General Manual: Page 4-33

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G6A02

B. High discharge current

ARRL General Manual: Page 4-33

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G4E11

C. A large energy storage system is needed to supply power when the wind is not blowing

ARRL General Manual: Page 4-33

Ham Academy Lesson: 2E

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G4E10

B. The diode prevents self-discharge of the battery though the panel during times of low or no illumination

ARRL General Manual: Page 4-34

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G6A04

D. Never

ARRL General Manual: Page 4-33

Ham Academy Lesson: 2E

General Class Questions valid thru 06-30-2019
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G6B14

C. RCA Phono

ARRL General Manual: Page 4-35

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B15

B. Reduced chance of incorrect mating

ARRL General Manual: Page 4-34

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B12

D. DE-9

ARRL General Manual: Page 4-36

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B17

C. A family of multiple circuit connectors suitable for audio and control signals

ARRL General Manual: Page 4-35

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B16

A. A moisture-resistant RF connector useful to 10 GHz

ARRL General Manual: Page 4-36

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B13

C. PL-259

ARRL General Manual: Page 4-36

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4B06

C. Better precision for most uses

ARRL General Manual: Page 4-37

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G6B18

B. A small threaded connector suitable for signals up to several GHz

ARRL General Manual: Page 4-36

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B05

D. It decreases the loading on circuits being measured

ARRL General Manual: Page 4-37

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B14

D. When adjusting tuned circuits

ARRL General Manual: Page 4-37

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B02

D. Complex waveforms can be measured

ARRL General Manual: Page 4-38

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B01

D. An oscilloscope

ARRL General Manual: Page 4-38

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B04

D. The attenuated RF output of the transmitter

ARRL General Manual: Page 4-38

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B03

A. An oscilloscope

ARRL General Manual: Page 4-38

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B12

B. Strong signals from nearby transmitters can affect the accuracy of measurements

ARRL General Manual: Page 4-39

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B11

C. Antenna and feed line

ARRL General Manual: Page 4-39

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B08

A. A field strength meter

ARRL General Manual: Page 4-40

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B13

C. Determining the impedance of an unknown or unmarked coaxial cable

ARRL General Manual: Page 4-39

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B10

A. Standing wave ratio

ARRL General Manual: Page 4-40

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G4B09

B. The radiation pattern of an antenna

ARRL General Manual: Page 4-40

Ham Academy Lesson: 2F

General Class Questions valid thru 06-30-2019
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G8A03

D. Frequency modulation

ARRL General Manual: Page 5-2

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8A02

B. Phase modulation

ARRL General Manual: Page 5-2

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8A07

A. Single sideband

ARRL General Manual: Page 5-2

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8A05

D. Amplitude modulation

ARRL General Manual: Page 5-2

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G7B09

C. The inductance and capacitance in the tank circuit

ARRL General Manual: Page 5-3

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G7B07

D. A filter and an amplifier operating in a feedback loop

ARRL General Manual: Page 5-3

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8B01

A. Mixer

ARRL General Manual: Page 5-4

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G7C05

D. Variable frequency with the stability of a crystal oscillator

ARRL General Manual: Page 5-4

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8B04

D. Multiplier

ARRL General Manual: Page 5-4

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8B03

A. Heterodyning

ARRL General Manual: Page 5-4

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G4D09

B. 14.347 to 14.350 MHz

ARRL General Manual: Page 5-5

Ham Academy Lesson: 3A

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G4D08

C. 7.175 to 7.178 MHz

ARRL General Manual: Page 5-5

Ham Academy Lesson: 3A

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G4D11

B. At least 3 kHz below the edge of the band

ARRL General Manual: Page 5-5

Ham Academy Lesson: 3A

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G4D10

A. At least 3 kHz above the edge of the segment

ARRL General Manual: Page 5-5

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8A06

C. Available transmitter power can be used more effectively

ARRL General Manual: Page 5-6

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8A04

B. Phase modulation

ARRL General Manual: Page 5-6

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G4A12

C. To permit monitoring of two different frequencies

ARRL General Manual: Page 5-8

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G4A03

C. The transceiver is set to different transmit and receive frequencies

ARRL General Manual: Page 5-8

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G7C02

D. Balanced modulator

ARRL General Manual: Page 5-8

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7C01

B. Filter

ARRL General Manual: Page 5-8

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G8B07

B. 416.7 Hz

ARRL General Manual: Page 5-9

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G8B06

D. 16 kHz

ARRL General Manual: Page 5-9

Ham Academy Lesson: 3A

General Class Questions valid thru 06-30-2019
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G4B07

B. Two non-harmonically related audio signals

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G8A11

A. The waveform created by connecting the peak values of the modulated signal

ARRL General Manual: Page 5-10

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4D01

A. Increase the intelligibility of transmitted phone signals during poor conditions

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4B15

A. Linearity

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4D03

D. All of these choices are correct

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4D02

B. It increases average power

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G8A10

C. Signal distortion caused by excessive drive

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

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G8A09

B. Transmit audio or microphone gain

ARRL General Manual: Page 5-11

Ham Academy Lesson: 3B

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G7B14

B. An amplifier in which the output preserves the input waveform

ARRL General Manual: Page 5-12

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G7B10

D. Low distortion

ARRL General Manual: Page 5-12

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4A04

B. A pronounced dip

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G8A08

D. Excessive bandwidth

ARRL General Manual: Page 5-12

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4A07

D. Excessive drive power

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G4A05

C. To reduce distortion due to excessive drive

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4A09

**C. To allow time for transmit-receive
changeover operations to complete properly
before RF output is allowed**

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4A08

**D. Maximum power output without exceeding
maximum allowable plate current**

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G7B11

B. CW

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G7B08

**B. Divide the RF output power by the DC input
power**

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7B13

B. To eliminate self-oscillations

ARRL General Manual: Page 5-14

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G7B12

D. Class C

ARRL General Manual: Page 5-13

Ham Academy Lesson: 3B

General Class Questions valid thru 06-30-2019
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G7C07

C. HF oscillator, mixer, detector

ARRL General Manual: Page 5-14

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G7C03

C. Mixer

ARRL General Manual: Page 5-14

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G7C08

D. Discriminator

ARRL General Manual: Page 5-15

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G7C04

D. Product detector

ARRL General Manual: Page 5-15

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G4A02

C. It may be possible to reduce or eliminate interference from other signals

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4A01

B. To reduce interference from carriers in the receiver passband

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7C09

D. All of the these choices are correct

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

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G4A11

A. To avoid interference from stations very close to the receive frequency

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G8B02

B. Image response

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G7C10

B. By converting the signal from analog to digital and using digital processing

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4C11

B. To remove noise from received signals

ARRL General Manual: Page 5-17

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G8B09

D. It results in the best signal to noise ratio

ARRL General Manual: Page 5-16

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4C13

B. A Digital Signal Processor (DSP) filter

ARRL General Manual: Page 5-17

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4C12

A. A wide range of filter bandwidths and shapes can be created

ARRL General Manual: Page 5-17

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G4A13

A. To reduce signal overload due to strong incoming signals

ARRL General Manual: Page 5-18

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G7C11

A. A radio in which most major signal processing functions are performed by software

ARRL General Manual: Page 5-17

Ham Academy Lesson: 3C

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G4D05

D. It is 100 times more powerful

ARRL General Manual: Page 5-18

Ham Academy Lesson: 3C

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G4D04

C. Received signal strength

ARRL General Manual: Page 5-18

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G4D07

C. Approximately 4 times

ARRL General Manual: Page 5-18

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G4D06

A. In a receiver

ARRL General Manual: Page 5-18

Ham Academy Lesson: 3C

General Class Questions valid thru 06-30-2019
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G4E04

B. The socket's wiring may be inadequate for the current drawn by the transceiver

ARRL General Manual: Page 5-19

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4E03

A. To the battery using heavy gauge wire

ARRL General Manual: Page 5-19

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4A15

D. All of these choices are correct

ARRL General Manual: Page 5-20

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4E05

C. The antenna system

ARRL General Manual: Page 5-19

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4E07

D. All of these choices are correct

ARRL General Manual: Page 5-20

Ham Academy Lesson: 3D

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G4C07

A. Connect all equipment grounds together

ARRL General Manual: Page 5-20

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C06

C. High RF voltages on the enclosures of station equipment

ARRL General Manual: Page 5-21

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C05

D. The ground wire has high impedance on that frequency

ARRL General Manual: Page 5-21

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C10

A. You receive reports of "hum" on your station's transmitted signal

ARRL General Manual: Page 5-21

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C09

D. Connect all ground conductors to a single point

ARRL General Manual: Page 5-21

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C01

B. Bypass capacitor

ARRL General Manual: Page 5-22

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
Emergency Amateur Radio Club - www.earchi.org/education

G7C06

B. About the same

ARRL General Manual: Page 5-21

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C03

C. Distorted speech

ARRL General Manual: Page 5-22

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C02

C. Arcing at a poor electrical connection

ARRL General Manual: Page 5-22

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C08

A. Placing a ferrite choke around the cable

ARRL General Manual: Page 5-22

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G4C04

A. On-and-off humming or clicking

ARRL General Manual: Page 5-22

Ham Academy Lesson: 3D

General Class Questions valid thru 06-30-2019
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G2E07

A. 3570 3600 kHz

ARRL General Manual: Page 6-1

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E04

B. 14.070 - 14.100 MHz

ARRL General Manual: Page 6-1

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E13

A. Winlink

ARRL General Manual: Page 6-2

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E08

D. Below the RTTY segment, near 14.070 MHz

ARRL General Manual: Page 6-1

Ham Academy Lesson: 4A

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G8A01

B. By changing an oscillator's frequency directly with a digital control signal

ARRL General Manual: Page 6-5

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C01

B. JT9 and JT65

ARRL General Manual: Page 6-3

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E06

B. 170 Hz

ARRL General Manual: Page 6-6

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C11

D. Mark and Space

ARRL General Manual: Page 6-5

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C09

A. The approximate transmitted symbol rate

ARRL General Manual: Page 6-7

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C04

C. A 5-bit code with additional start and stop bits

ARRL General Manual: Page 6-6

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C08

B. Upper case letters use longer Varicode signals and thus slow down transmission

ARRL General Manual: Page 6-7

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C02

A. The number varies

ARRL General Manual: Page 6-7

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C03

C. Header

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G8C12

A. Varicode

ARRL General Manual: Page 6-7

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E09

C. Joining an existing contact is not possible, PACTOR connections are limited to two stations

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E02

B. Put the modem or controller in a mode which allows monitoring communications without a connection

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

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G8C07

B. It requests the packet be retransmitted

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

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G8C05

A. The receiver is requesting the packet be retransmitted

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

General Class Questions valid thru 06-30-2019
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G2E01

D. LSB

ARRL General Manual: Page 6-9

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G8C10

C. By transmitting redundant information with the data

ARRL General Manual: Page 6-8

Ham Academy Lesson: 4A

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G2E14

D. All of these choices are correct

ARRL General Manual: Page 6-9

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G2E05

B. USB

ARRL General Manual: Page 6-9

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G8B10

B. Higher symbol rates require wider bandwidth

ARRL General Manual: Page 6-9

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G8B05

D. 2300 Hz

ARRL General Manual: Page 6-9

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G2E11

D. Overmodulation

ARRL General Manual: Page 6-11

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G8B08

B. Some modes have high duty cycles which could exceed the transmitter's average power rating.

ARRL General Manual: Page 6-10

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G1E03

A. The station initiating the contact must be under local or remote control

ARRL General Manual: Page 6-12

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G4A14

B. Improper action of ALC distorts the signal and can cause spurious emissions

ARRL General Manual: Page 6-11

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G2E10

D. Transmit a connect message on the station's published frequency

ARRL General Manual: Page 6-12

Ham Academy Lesson: 4B

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G1E11

C. Automatically controlled digital station

ARRL General Manual: Page 6-12

Ham Academy Lesson: 4B

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G1E13

D. Anywhere in the 1.25-meter or shorter wavelength bands, and in specified segments of the 80-meter through 2-meter bands

ARRL General Manual: Page 6-12

Ham Academy Lesson: 4B

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G2E12

C. Frequency is horizontal, signal strength is intensity, time is vertical

ARRL General Manual: Page 6-12

Ham Academy Lesson: 4B

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G2E03

D. All of these choices are correct

ARRL General Manual: Page 6-13

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G1E12

A. Under no circumstances

ARRL General Manual: Page 6-13

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G0B10

A. Lead can contaminate food if hands are not washed carefully after handling the solder

ARRL General Manual: Page 9-2

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G8C06

B. The connection is dropped

ARRL General Manual: Page 6-13

Ham Academy Lesson: 4B

General Class Questions valid thru 06-30-2019
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G0B02

C. AWG number 12

ARRL General Manual: Page 9-4

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B14

C. Electrical safety inside the ham shack

ARRL General Manual: Page 9-3

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B06

D. It ensures that hazardous voltages cannot appear on the chassis

ARRL General Manual: Page 9-4

Ham Academy Lesson: 4C

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G0B03

D. 15 amperes

ARRL General Manual: Page 9-4

Ham Academy Lesson: 4C

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G0B05

B. Current flowing from one or more of the voltage-carrying wires directly to ground

ARRL General Manual: Page 9-5

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B01

A. Only the two wires carrying voltage

ARRL General Manual: Page 9-5

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B04

A. Danger of carbon monoxide poisoning

ARRL General Manual: Page 9-6

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B12

C. To ensure that dangerous voltages are removed if the cabinet is opened

ARRL General Manual: Page 9-5

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B15

A. The generator should be located in a well-ventilated area

ARRL General Manual: Page 9-6

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B13

A. Disconnect the incoming utility power feed

ARRL General Manual: Page 9-6

Ham Academy Lesson: 4C

General Class Questions valid thru 06-30-2019
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G0B11

D. They must be bonded together with all other grounds

ARRL General Manual: Page 9-7

Ham Academy Lesson: 4C

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G0B09

D. A soldered joint will likely be destroyed by the heat of a lightning strike

ARRL General Manual: Page 9-7

Ham Academy Lesson: 4C

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G0A01

A. It heats body tissue

ARRL General Manual: Page 9-8

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A02

D. All of these choices are correct

ARRL General Manual: Page 9-7

Ham Academy Lesson: 4D

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G0A07

A. A lower transmitter duty cycle permits greater short-term exposure levels

ARRL General Manual: Page 9-9

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A04

D. The total RF exposure averaged over a certain time

ARRL General Manual: Page 9-9

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A08

C. Perform a routine RF exposure evaluation

ARRL General Manual: Page 9-10

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A03

D. All of these choices are correct

ARRL General Manual: Page 9-10

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A05

A. Take action to prevent human exposure to the excessive RF fields

ARRL General Manual: Page 9-11

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A09

B. A calibrated field strength meter with a calibrated antenna

ARRL General Manual: Page 9-10

Ham Academy Lesson: 4D

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G0A10

D. Take precautions to ensure that the antenna cannot be pointed in their direction

ARRL General Manual: Page 9-11

Ham Academy Lesson: 4D

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G0A06

D. It should be installed such that it is protected against unauthorized access

ARRL General Manual: Page 9-11

Ham Academy Lesson: 4D

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G0A12

B. Turn off the transmitter and disconnect the feed line

ARRL General Manual: Page 9-13

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0A11

C. Make sure that MPE limits are not exceeded in occupied areas

ARRL General Manual: Page 9-12

Ham Academy Lesson: 4D

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G0B07

B. Confirm that the belt is rated for the weight of the climber and that it is within its allowable service life

ARRL General Manual: Page 9-14

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G0B08

B. Make sure all circuits that supply power to the tower are locked out and tagged

ARRL General Manual: Page 9-13

Ham Academy Lesson: 4D

General Class Questions valid thru 06-30-2019
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G9B08

A. It steadily increases

ARRL General Manual: Page 7-2

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B04

A. It is a figure-eight at right angles to the antenna

ARRL General Manual: Page 7-2

Ham Academy Lesson: 5A

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G9C20

A. dBi refers to an isotropic antenna, dBd refers to a dipole antenna

ARRL General Manual: Page 7-2

Ham Academy Lesson: 5A

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G9C19

B. dBi gain figures are 2.15 dB higher than dBd gain figures

ARRL General Manual: Page 7-2

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B11

C. 131 feet

ARRL General Manual: Page 7-3

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B10

D. 32 feet

ARRL General Manual: Page 7-3

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B03

B. It increases

ARRL General Manual: Page 7-4

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B02

B. Slope the radials downward

ARRL General Manual: Page 7-4

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B12

A. 8 feet

ARRL General Manual: Page 7-4

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B06

C. On the surface of the Earth or buried a few inches below the ground

ARRL General Manual: Page 7-4

Ham Academy Lesson: 5A

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G4E02

D. To reduce high voltage discharge from the tip of the antenna

ARRL General Manual: Page 7-5

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G4E01

C. To electrically lengthen a physically short antenna

ARRL General Manual: Page 7-5

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B01

B. You may experience RF burns when touching metal objects in your station

ARRL General Manual: Page 7-5

Ham Academy Lesson: 5A

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G4E06

C. Operating bandwidth may be very limited

ARRL General Manual: Page 7-5

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B07

B. It steadily decreases

ARRL General Manual: Page 7-6

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9B05

C. If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional

ARRL General Manual: Page 7-6

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G2D04

B. A map that shows true bearings and distances from a particular location

ARRL General Manual: Page 7-7

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G9B09

A. Lower ground reflection losses

ARRL General Manual: Page 7-7

Ham Academy Lesson: 5A

General Class Questions valid thru 06-30-2019
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G9C02

B. 1/2 wavelength

ARRL General Manual: Page 7-9

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G2D11

C. A directional antenna

ARRL General Manual: Page 7-8

Ham Academy Lesson: 5B

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G9C04

A. The reflector is normally the longest element

ARRL General Manual: Page 7-9

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G9C03

B. The director is normally the shortest element

ARRL General Manual: Page 7-9

Ham Academy Lesson: 5B

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G9C08

D. The direction of maximum radiated field strength from the antenna

ARRL General Manual: Page 7-9

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G9C07

C. The power radiated in the major radiation lobe compared to the power radiated in exactly the opposite direction

ARRL General Manual: Page 7-9

Ham Academy Lesson: 5B

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G9C05

A. Gain increases

ARRL General Manual: Page 7-10

Ham Academy Lesson: 5B

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G9C01

A. Larger diameter elements

ARRL General Manual: Page 7-10

Ham Academy Lesson: 5B

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G9C11

A. To match the relatively low feed point impedance to 50 ohms

ARRL General Manual: Page 7-10

Ham Academy Lesson: 5B

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G9C10

D. All of these choices are correct

ARRL General Manual: Page 7-10

Ham Academy Lesson: 5B

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G9C06

D. The reflector element must be approximately 5 percent longer than the driven element

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

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G9C12

A. It does not require that the elements be insulated from the boom

ARRL General Manual: Page 7-11

Ham Academy Lesson: 5B

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G9C14

B. About the same

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

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G9C13

A. 1/4 wavelength

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

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G9C16

D. About the same

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

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G9C15

B. Slightly more than 1/4 wavelength

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

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G9C18

A. The polarization of the radiated signal changes from horizontal to vertical

ARRL General Manual: Page 7-13

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G9C17

B. 1/3 wavelength

ARRL General Manual: Page 7-12

Ham Academy Lesson: 5B

General Class Questions valid thru 06-30-2019
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G9D02

B. High vertical angle radiation for working stations within a radius of a few hundred kilometers

ARRL General Manual: Page 7-13

Ham Academy Lesson: 5C

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G9D01

D. Near Vertical Incidence sky-wave

ARRL General Manual: Page 7-13

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D03

D. Between 1/10 and 1/4 wavelength

ARRL General Manual: Page 7-14

Ham Academy Lesson: 5C

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G9C09

B. Approximately 3 dB higher

ARRL General Manual: Page 7-14

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D06

A. Wide bandwidth

ARRL General Manual: Page 7-14

Ham Academy Lesson: 5C

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G9D05

D. It narrows the main lobe in elevation

ARRL General Manual: Page 7-14

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D08

B. It has high losses compared to other types of antennas

ARRL General Manual: Page 7-15

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D07

A. Length and spacing of the elements increase logarithmically from one end of the boom to the other

ARRL General Manual: Page 7-14

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D10

D. A very long and low directional receiving antenna

ARRL General Manual: Page 7-15

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D09

B. Directional receiving for low HF bands

ARRL General Manual: Page 7-15

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D11

D. They have poor harmonic rejection

ARRL General Manual: Page 7-16

Ham Academy Lesson: 5C

General Class Questions valid thru 06-30-2019
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G9D04

A. To permit multiband operation

ARRL General Manual: Page 7-16

Ham Academy Lesson: 5C

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G9A03

D. 300 ohms

ARRL General Manual: Page 7-17

Ham Academy Lesson: 5D

General Class Questions valid thru 06-30-2019
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G9A01

A. The distance between the centers of the conductors and the radius of the conductors

ARRL General Manual: Page 7-17

Ham Academy Lesson: 5D

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G9A04

C. A difference between feed line impedance and antenna feed point impedance

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

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G9A02

B. 50 and 75 ohms

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

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Emergency Amateur Radio Club - www.earchi.org/education

G9A10

D. 5:1

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

General Class Questions valid thru 06-30-2019
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G9A09

A. 4:1

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

General Class Questions valid thru 06-30-2019
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G9A12

A. 2:1

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

General Class Questions valid thru 06-30-2019
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G9A11

B. 1:1

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

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G4A06

C. Antenna coupler or antenna tuner

ARRL General Manual: Page 7-19

Ham Academy Lesson: 5D

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G9A13

C. 6:1

ARRL General Manual: Page 7-18

Ham Academy Lesson: 5D

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G9A08

B. 5 to 1

ARRL General Manual: Page 7-19

Ham Academy Lesson: 5D

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G9A07

D. The antenna feed point impedance must be matched to the characteristic impedance of the feed line

ARRL General Manual: Page 7-19

Ham Academy Lesson: 5D

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G9A06

D. Decibels per 100 feet

ARRL General Manual: Page 7-20

Ham Academy Lesson: 5D

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G9A05

B. Attenuation increases

ARRL General Manual: Page 7-20

Ham Academy Lesson: 5D

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G9A15

A. The higher the transmission line loss, the more the SWR will read artificially low

ARRL General Manual: Page 7-20

Ham Academy Lesson: 5D

General Class Questions valid thru 06-30-2019
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G9A14

B. If a transmission line is lossy, high SWR will increase the loss

ARRL General Manual: Page 7-20

Ham Academy Lesson: 5D

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G3B05

A. They are bent back to the Earth

ARRL General Manual: Page 8-3

Ham Academy Lesson: 5E

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G3C01

A. The D layer

ARRL General Manual: Page 8-1

Ham Academy Lesson: 5E

General Class Questions valid thru 06-30-2019
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G3C04

D. The highest takeoff angle that will return a radio wave to the Earth under specific ionospheric conditions

ARRL General Manual: Page 8-3

Ham Academy Lesson: 5E

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G3C02

A. Where the Sun is overhead

ARRL General Manual: Page 8-3

Ham Academy Lesson: 5E

General Class Questions valid thru 06-30-2019
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G3B09

C. 2,500 miles

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

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G3B02

A. Short skip sky-wave propagation on the 10-meter band

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

General Class Questions valid thru 06-30-2019
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G3C03

C. Because it is the highest ionospheric region

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

General Class Questions valid thru 06-30-2019
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G3B10

B. 1,200 miles

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

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G3C12

D. The D layer

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

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G3C05

C. The D layer absorbs signals at these frequencies during daylight hours

ARRL General Manual: Page 8-4

Ham Academy Lesson: 5E

General Class Questions valid thru 06-30-2019
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G3B01

D. A well-defined echo might be heard

ARRL General Manual: Page 8-5

Ham Academy Lesson: 5E

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G2D06

C. 180 degrees from its short-path heading

ARRL General Manual: Page 8-5

Ham Academy Lesson: 5E

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G3A11

D. 11 years

ARRL General Manual: Page 8-5

Ham Academy Lesson: 5F

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G3A01

A. Higher sunspot numbers generally indicate a greater probability of good propagation at higher frequencies

ARRL General Manual: Page 8-5

Ham Academy Lesson: 5F

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G3A07

D. At any point in the solar cycle

ARRL General Manual: Page 8-6

Ham Academy Lesson: 5F

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G3A04

D. 15 meters, 12 meters and 10 meters

ARRL General Manual: Page 8-6

Ham Academy Lesson: 5F

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G3A10

C. The Sun's rotation on its axis

ARRL General Manual: Page 8-6

Ham Academy Lesson: 5F

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G3A09

C. Long-distance communication in the upper HF and lower VHF range is enhanced

ARRL General Manual: Page 8-6

Ham Academy Lesson: 5F

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G3A12

B. The short term stability of the Earth's magnetic field

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3A05

D. A measure of solar radiation at 10.7 centimeters wavelength

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3B07

A. The Lowest Usable Frequency for communications between two points

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3A13

C. The long term stability of the Earth's geomagnetic field

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3B12

D. All of these choices are correct

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3B08

B. The Maximum Usable Frequency for communications between two points

ARRL General Manual: Page 8-7

Ham Academy Lesson: 5F

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G3B03

A. Select a frequency just below the MUF

ARRL General Manual: Page 8-8

Ham Academy Lesson: 5F

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G3A03

C. 8 minutes

ARRL General Manual: Page 8-8

Ham Academy Lesson: 5F

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G3B06

C. They are completely absorbed by the ionosphere

ARRL General Manual: Page 8-8

Ham Academy Lesson: 5F

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G3B04

A. Listen for signals from an international beacon in the frequency range you plan to use

ARRL General Manual: Page 8-8

Ham Academy Lesson: 5F

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G3A02

B. It disrupts signals on lower frequencies more than those on higher frequencies

ARRL General Manual: Page 8-9

Ham Academy Lesson: 5F

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G3B11

A. No HF radio frequency will support ordinary sky-wave communications over the path

ARRL General Manual: Page 8-8

Ham Academy Lesson: 5F

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G3A08

B. Degraded high-latitude HF propagation

ARRL General Manual: Page 8-9

Ham Academy Lesson: 5G

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G3A06

D. A temporary disturbance in the Earth's magnetosphere

ARRL General Manual: Page 8-9

Ham Academy Lesson: 5G

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G3A15

D. 20 to 40 hours

ARRL General Manual: Page 8-9

Ham Academy Lesson: 5G

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G3A14

B. HF communications are disturbed

ARRL General Manual: Page 8-9

Ham Academy Lesson: 5G

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G3C06

B. They have a wavering sound

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3A16

A. Auroras that can reflect VHF signals

ARRL General Manual: Page 8-10

Ham Academy Lesson: 5G

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G3C08

A. Only a small part of the signal energy is scattered into the skip zone

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3C07

D. Energy is scattered into the skip zone through several different radio wave paths

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3C10

D. The signal is heard on a frequency above the Maximum Usable Frequency

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3C09

B. Scatter

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3C13

B. Short distance MF or HF propagation using high elevation angles

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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G3C11

B. A horizontal dipole placed between 1/8 and 1/4 wavelength above the ground

ARRL General Manual: Page 8-11

Ham Academy Lesson: 5G

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Figure G7-1

