## **Doppler Radar - Review Questions**



- 1. Doppler radar emits short bursts of radio waves called
  - a. pulses
  - b. digits
  - c. signals
  - d. radar data units (RDU)
- 2. What additional information aside from reflectivity can the Doppler radar provide?
  - a. rotational intensity
  - b. radial velocity
  - c. relational vorticity
- 3. A collection of preset elevation slices that the radar sweeps through is called a(n)
  - a. elevation coverage product (ECP)
  - b. vacuum continuity product (VCP)
  - c. volume coverage pattern (VCP)
  - d. elevation coverage pattern (ECP)

4. Once the radar has swept through all of the preset elevation angles a \_\_\_\_\_\_ is completed.

- a. level scan
- b. volume scan
- c. linear scan
- d. radar scan
- 5. Rain and hail will typically be displayed on what radar product?
  - a. velocity
  - b. reflectivity
  - c. rain/hail
  - d. wind

6. An appendage or hook shape to the reflectivity echo usually indicates that a thunderstorm is \_\_\_\_\_\_.

- a. dissipating
- b. growing
- c. rotating
- d. splitting

- 7. There are \_\_\_\_\_ WSR-88D Doppler radars in operation in the nation, including the U.S. Territory of Guam and the Commonwealth of Puerto Rico.
  - a. 85
  - b. 105
  - c. 137
  - d. 155

8. The total accumulative time the Doppler radar is transmitting a radar signal is \_\_\_\_\_

- a. 7 seconds
- b. 70 seconds
- c. 7 minutes
- d. 17 minutes
- 9. This phenomenon, called \_\_\_\_\_\_, is where the radar beam bends more than normal and is curved more toward the earth's surface.
  - a. subrefraction
  - b. superrefraction
  - c. subreflection
  - d. superreflection
- 10. The atmospheric condition that causes superrefraction which bends the radar beam equal to or more than the earth's curvature is called \_\_\_\_\_\_.
  - a. tubing
  - b. ducting
  - c. tunneling
  - d. anomalous propagation
- 11. The best way to determine which way rainfall, as indicted by radar, is moving is to...
  - a. look at the radial velocity image.
  - b. view the storm relative motion image.
  - c. look at the one-hour precipitation image.
  - d. view a loop of the reflectivity images.
- 12. Weather warnings are displayed on the Doppler radar in what four colors...
  - a. red, orange, yellow, and purple.
  - b. yellow, red, green, and purple.
  - c. red, yellow, green, and blue.
  - d. green, orange, purple, and blue.

- 13. The time listed on the NWS Doppler radar images is in \_\_\_\_\_
  - a. z-time
  - b. c-time.
  - c. Daylight Saving Time
  - d. Eastern Standard Time
- 14. Which of the following Doppler radar images is not available from the NWS is...
  - a. One-hour Precipitation.
  - b. Base Velocity.
  - c. Composite Velocity.
  - d. Composite Reflectivity.
- 15. In the velocity images from the NWS Doppler radar, red colors mean the wind is \_\_\_\_\_\_ and the green colors mean the wind is \_\_\_\_\_\_
  - a. moving toward from the radar, moving away the radar
  - b. moving away from the radar, moving toward the radar
  - c. moving faster, moving slower
  - d. moving slower, moving faster
- 16. AP stands for...
  - a. almost precipitation
  - b. any precipitation
  - c. after propagation
  - d. anomalous propagation
- 17. When viewing the Doppler radar velocity images (Base Velocity and Storm Relative Motion), red colors indicated wind moving toward the radar and green colors mean wind is moving away from the radar.
  - a. True
  - b. False
- 18. The term for the bending of the radar beam through the atmosphere is called...
  - a. Contraction
  - b. Refraction
  - c. Diffraction
  - d. Reflection
- 19. On the RIDGE radar base reflectivity display, the color green indicates all of the following except...
  - a. inbound wind.
  - b. a value of energy returned to the radar after bouncing off an object.
  - c. the beginning of light rain.
  - d. the color of the 20 dBZ level.

- 20. In this modern age, the NWS Doppler radar image presents an accurate picture of the current weather within the range of the radar site.
  - a. True
  - b. False.