

XIII. A. Meteorological Tools: Questions

1. A vehicle with its horn sounding moves away from an observer at point A and toward an observer at point B.
 - a. Should the pitch of the horn at point B be higher or lower than at point A?
 - b. What effect explains the difference in pitch experienced at points A and B?

2. What advantages does Doppler radar have over conventional radar?

3. How do satellites help identify clouds that are most likely to produce precipitation?

4. What information is provided by water vapor images?

5. What advantage do geostationary satellites have over polar satellites? Name one disadvantage.

6. Name four different types of thermometers: (List advantages and disadvantages for each)

7. What is an Anemometer and what makes it inaccurate?

8. What is a Wind Vane?

9. How does a Bucket Rain Gage work?

10. What is the difference between Clear-Air Mode and Precipitation Mode for RADAR? Which better for snow?

11. What does dBZ mean and measure?

12. What are the two RADAR types and what are their advantages over the other?

13. What are some examples of RADAR Ground Clutter:

14. Can you get a total precipitation in inches by using RADAR? If so how?

15. What is a Bow echo in RADAR?

16. What is a Hooked echo in RADAR?

17. How can you get a wind direction from using Doppler RADAR? Describe what it looks like on a screen:

18. What is an IR satellite image and how is it used in Meteorology?