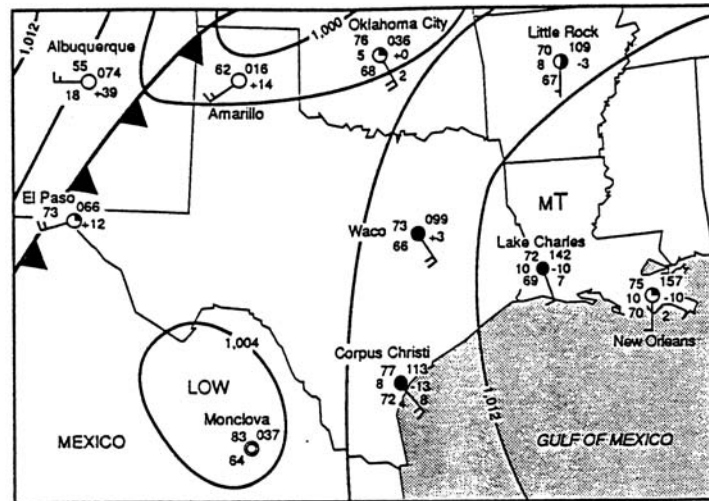


Weather Review 2

Base your answers to **questions 1-6** on the *Earth Science Reference Tables* your knowledge of Earth Science, and the map shown below. The map shows a part of the southern United States and northern Mexico.

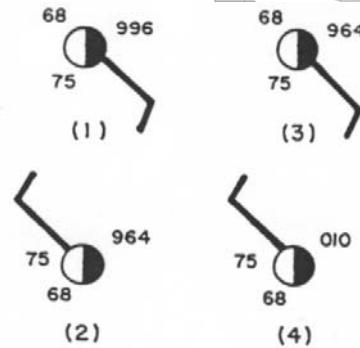


- At which city is the visibility 8 miles?
 - 1 Little Rock, Arkansas
 - 2 Lake Charles, Louisiana
 - 3 Oklahoma City, Oklahoma
 - 4 New Orleans, Louisiana
- The isolines on the map connect locations that have the same
 - 1 dewpoint temperature
 - 2 air temperature
 - 3 barometric pressure
 - 4 relative humidity
- Which kind of air mass is influencing the weather of Lake Charles, Louisiana?
 - 1 warm and dry
 - 2 warm and moist
 - 3 cold and dry
 - 4 cold and moist
- Southeast winds at 20 knots are occurring at
 - 1 Albuquerque, New Mexico
 - 2 Amarillo, Texas
 - 3 Oklahoma City, Oklahoma
 - 4 El Paso, Texas
- Which city has the least chance of precipitation during the next 3 hours?
 - 1 Lake Charles, Louisiana
 - 2 Waco, Texas
 - 3 Oklahoma City, Oklahoma
 - 4 Albuquerque, New Mexico
- The pressure measured in Corpus Christie 3 hours prior to the readings on the map would have been
 - 1 1010.0 mb
 - 2 1012.6 mb
 - 3 100 mb
 - 4 1024.3 mb
- The air mass over Albuquerque, New Mexico probably originated over
 - 1 the Gulf of Mexico
 - 2 the southwest U.S.
 - 3 central Canada
 - 4 the north Atlantic Ocean

Base your answers to **questions 8-12** on the *Earth Science Reference Tables* and the data table below. The table contains 9 a.m. weather readings during a four day period for a location in New York State.

	DATA TABLE			
	Temperature (to nearest degree)	Air Pressure (mb)	Dewpoint (to nearest degree)	Wind Direction and Speed (knots)
9 a.m. Monday	24°C (75°F)	996.4	20°C (68°F)	NW 10
9 a.m. Tuesday	20°C (68°F)	962.4	19°C (66°F)	SSE 25
9 a.m. Wednesday	17°C (63°F)	1013.8	12°C (54°F)	W 15
9 a.m. Thursday	7°C (45°F)	1020.2	-2°C (28°F)	N 10

8. Which weather station model most likely represents the weather conditions at 9 a.m. on Monday?



9. Which region is the most likely source of the air mass over this location on Thursday?

- 1 northern Canada
- 2 the Gulf of Mexico
- 3 the south Atlantic
- 4 southern California

10. On which day did precipitation most likely occur?

- | | |
|-----------|-------------|
| 1 Monday | 3 Wednesday |
| 2 Tuesday | 4 Thursday |

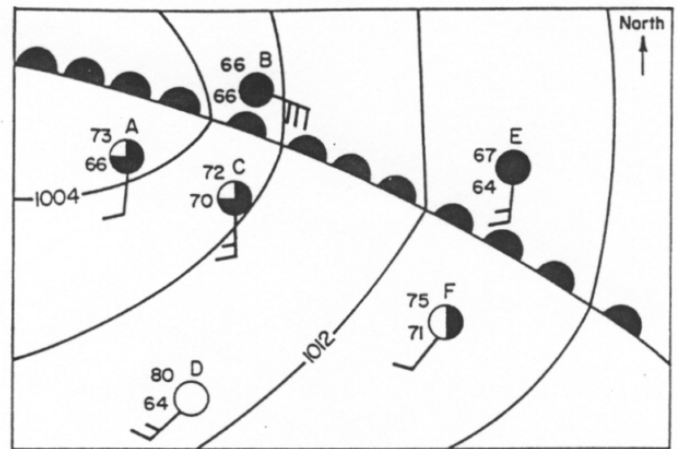
11. According to the wind speeds shown, on which day did the highest pressure gradient most probably exist between this location and another nearby region?

- | | |
|-----------|-------------|
| 1 Monday | 3 Wednesday |
| 2 Tuesday | 4 Thursday |

12. The relative humidity at 9 a.m. on Wednesday was approximately

- | | |
|-------|-------|
| 1 8% | 3 49% |
| 2 26% | 4 72% |

Base your answers to **questions 13-21** on the *Earth Science Reference Tables*, the diagram below, and your knowledge of Earth Science. The diagram represents a weather system over the central United States. Letters A through F represent weather stations on the map.



13. Which weather station has the greatest amount of cloud cover?

- | | |
|-----|-----|
| 1 A | 3 F |
| 2 E | 4 D |

14. At which weather station is the wind speed the greatest?

- | | |
|-----|-----|
| 1 F | 3 C |
| 2 B | 4 D |

15. The barometric pressure at weather station B is

- | | |
|-----------|-----------|
| 1 1000 mb | 3 1007 mb |
| 2 1004 mb | 4 1008 mb |

16. In order to test the rate of evaporation, equal amounts of water are exposed to the open air outside each weather station. At which station will the water probably evaporate the fastest?

- | | |
|-----|-----|
| 1 A | 3 C |
| 2 F | 4 D |

17. The warm front is moving toward the

- | | |
|-------------|-------------|
| 1 northeast | 3 southeast |
| 2 northwest | 4 southwest |

18. Where does precipitation occur with respect to the warm front?

- 1 southwest of the front
- 2 northeast of the front
- 3 both southwest and northeast of the front
- 4 precipitation is never associated with a warm front

19. Southeast winds were recorded at station

- | | |
|-----|-----|
| 1 A | 3 C |
| 2 B | 4 D |

20. Which weather condition would be located near the northwest corner of the map?

- 1 the center of an anticyclone
- 2 the center of a high pressure system
- 3 clear skies and cool breezes
- 4 the center of a low pressure system

21. How will the weather conditions change at station E as the front passes?

- 1 an increase in pressure, clearing skies, and warmer temperatures
- 2 an increase in cloud cover followed by lower pressure and warmer temperatures
- 3 heavy precipitation followed by cooler temperatures
- 4 an increase in wind speed, a decrease in cloud cover with no change in temperature