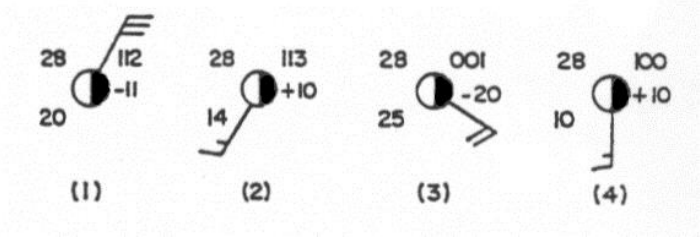
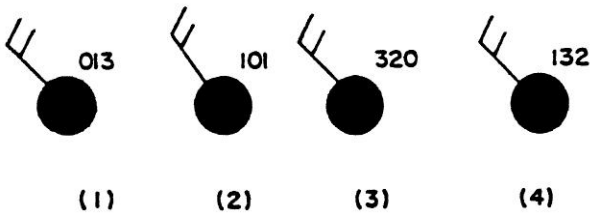
Name _____ Date _____

Station Models Review

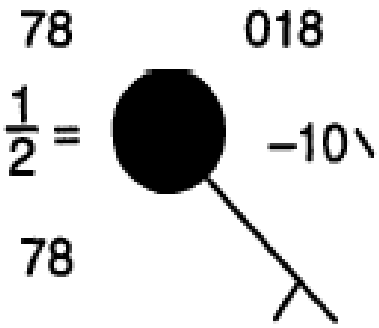
1. Which weather station model indicates the greatest probability of precipitation?



2. A weather station records a barometric pressure of 1010.1mb. Which diagram below would best represent this weather station on a weather map?



Questions 3-5 – Use the station model to the right.

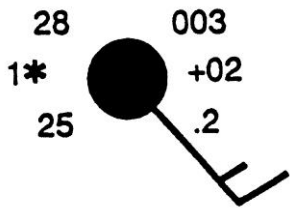


3. What is the relative humidity at this station?
   (1) 18%
   (2) 78%
   (3) 10%
   (4) 100%

4. What is the present barometric trend?
   (1) a 10mb rise in the past 3 hours
   (2) a 10mb drop in the past 3 hours
   (3) a 1.0mb rise in the past 3 hours
   (4) a 1.0mb drop in the past 3 hours

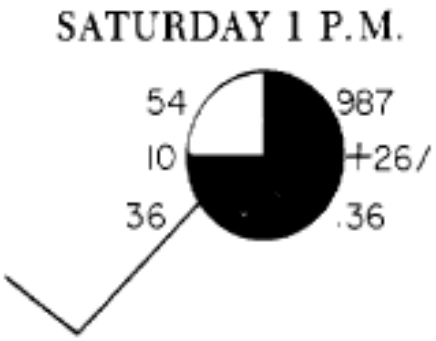
5. What is the wind speed and direction recorded at the station?
   (1) southeast winds at 10 knots
   (2) southwest winds at 10 knots
   (3) southeast winds at 5 knots
   (4) southwest winds at 10 knots

The station model to the right represents atmospheric conditions at a location in New York at noon on a day in January.



6. What is the pressure trend indicated on the station model?
   1 rising
   2 falling
   3 steady
   4 steady, then falling

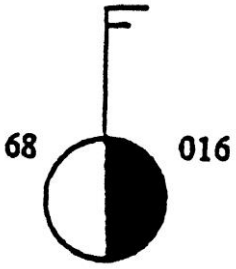
Base your answers to questions 7-8 on the diagram to the right which represents a weather station model for a given location.



7. What is the approximate wind speed at this station in knots?
   1 1 knots
   2 10 knots
   3 5 knots
   4 13 knots

8. What was the barometric pressure in millibars at this station?
   1 987.0 mb
   2 998.7 mb
   3 1,098.7 mb
   4 1078.9 mb

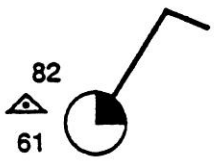
Base your answers to questions 9-10 on the *Earth Science Reference Tables* and the diagrams below of the weather station model.



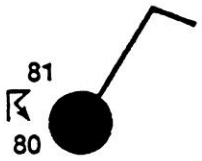
9. What is the air pressure in the area represented by this station model?
   (1) 169 mb
   (2) 901.6 mb
   (3) 1001.6 mb
   (4) 1016.0 mb

10. The wind at this station was from the
   (1) northeast
   (2) south
   (3) north
   (4) northwest

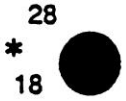
11. Which weather station model represents a location where a thunderstorm is occurring?



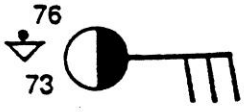
(1)



(3)

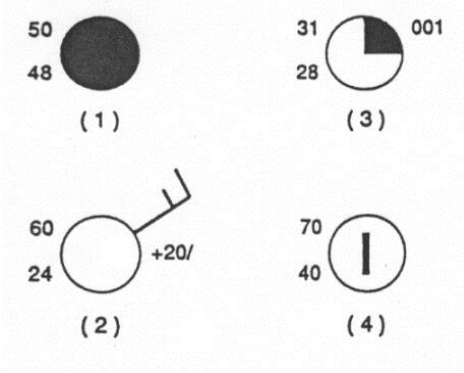


(2)

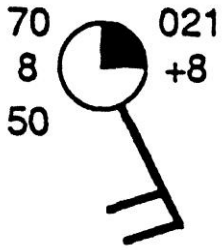


(4)

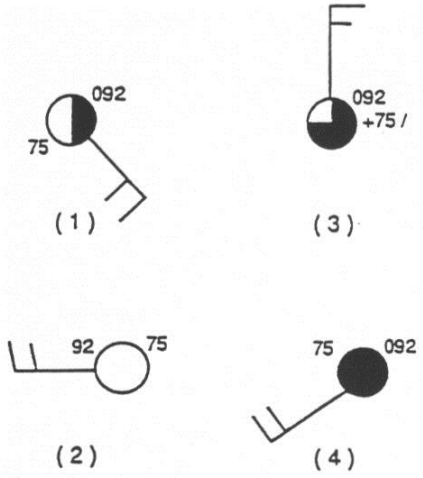
12. Which weather station model best represents the location with the greatest probability of precipitation?



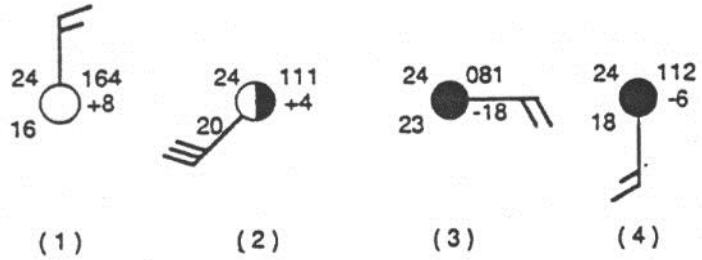
13. The relative humidity at this station can best be described as
    (1) low with a slim chance of precipitation
    (2) high with a slim chance of precipitation
    (3) low with a high probability of precipitation
    (3) high with a high probability of precipitation



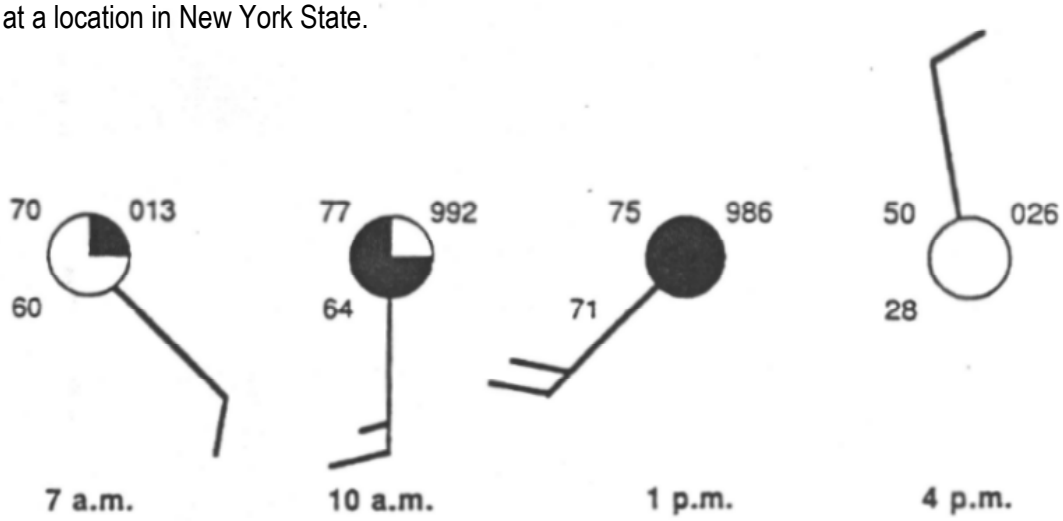
14. Which station model represents an atmospheric pressure of 1009.2 mb and a temperature of 75°F?



15. Which weather station model indicates overcast skies and the greatest drop in pressure in the last 3 hours?



Base your answers to questions 16-20 on the *Earth Science Reference Tables* and the diagrams below. The diagrams represent station models showing weather data collected at four different times during 1 day at a location in New York State.



16. At which time of day was the greatest wind velocity recorded?
    1 1 p.m.
    2 10 a.m.
    3 7 a.m.
    4 4 p.m.

17. What was the barometric pressure at 4.p.m?
    1 26.0 mb
    2 260 mb
    3 1002.6 mb
    4 1026.0 mb

18. At what time was the probability of precipitation the greatest at this location?
    1 1 p.m.
    2 10 a.m.
    3 7 a.m.
    4 4 p.m.

19. The lowest relative humidity was recorded at
    1 1 p.m.
    2 10 a.m.
    3 7 a.m.
    4 4 p.m.

20. Which station model best represents the probable weather conditions at 7 p.m. if the present trend continues?