

EXERCISE IN READING TOPOGRAPHIC MAPS

Answer the following questions using the topographic quadrangle provided by your professor. This exercise is divided into three parts: the map margin, map symbols, and contours.

Map Margin

1. What is your map name?
2. What is your map date?
3. What is the latitude and longitude of the southeast corner of the map? Be sure to indicate north, south, east or west for the respective values.
4. Examine the scale in the center of the lower margin of the map. How many inches on the map represent one mile on the ground?
5. What is the vertical distance between each topographic contour (i.e. the contour interval) on the map?
6. What is the name of the topographic quadrangle immediately to the north of your quadrangle?
To the northeast?
7. What symbol is used to indicate the city limits of the largest community on your map?
8. Find a school and a church. How do the symbols differ? Sketch the symbols below.
9. How can you distinguish a small water tank from a large one?

10. Illustrate how the following symbols differ for a:
trail,
unimproved road,
railroad,
power line, and
pipeline.
11. How does a contour line with an elevation differ from one without an elevation?
12. How can you distinguish contours forming a closed depression from those indicating a hill?
13. How can you distinguish a woodland from an area with low (scrub) trees?
14. What symbol indicates that a woodland is flooded (i.e. a swamp)?
15. What do the salmon- or pink-tinted areas represent?
16. How can you distinguish a fence line from a pipeline or a trail?
17. What symbol is used to indicate that a wetland is a submerged marsh rather than a lake?
18. What symbol is used to indicate that flow in a stream is intermittent (i.e. ephemeral) rather than constant (i.e. perennial)?
19. Some water wells are shown on topographic maps.
 - a. How does the symbol for a water well differ from an oil or gas well?
 - b. What is the symbol for windmill? A water tank?
20. What is the symbol for a spring?
21. Describe the location of one on your map.

22. What is the symbol for a gravel pit or quarry?

How does this differ from the symbol for a mine? Draw both.

23. What do the black numbers at the top of a hill or next to a road intersection indicate?

24. What do the letters “BM” stand for when shown next to black numbers and a black X on the map?

25. Describe the geographic area of the map which has the most closely spaced contours?

What does the spacing of the contours indicate?

26. Describe the geographic area of the map which has the most widely spaced contours?

What does the spacing of the contours indicate?

27. Find a creek or stream valley and study the pattern of the contours. Which direction (upstream or downstream) do the contours narrow (form a V)?

28. Find a public school on the map and determine its elevation above sea level. Write the name and the elevation below.

