
SOIL AND WATER CONSERVATION

1. The legal land description for the area designated by **x** is:
- A. SE 1/4, NE 1/4, Sec 24, Township B
 - B. SW 1/4, NW 1/4, Sec 24, Township B
 - C. SE 1/4, NW 1/4, Sec 24, Township B
 - D. NW 1/4, SW 1/4, Sec 24, Township B

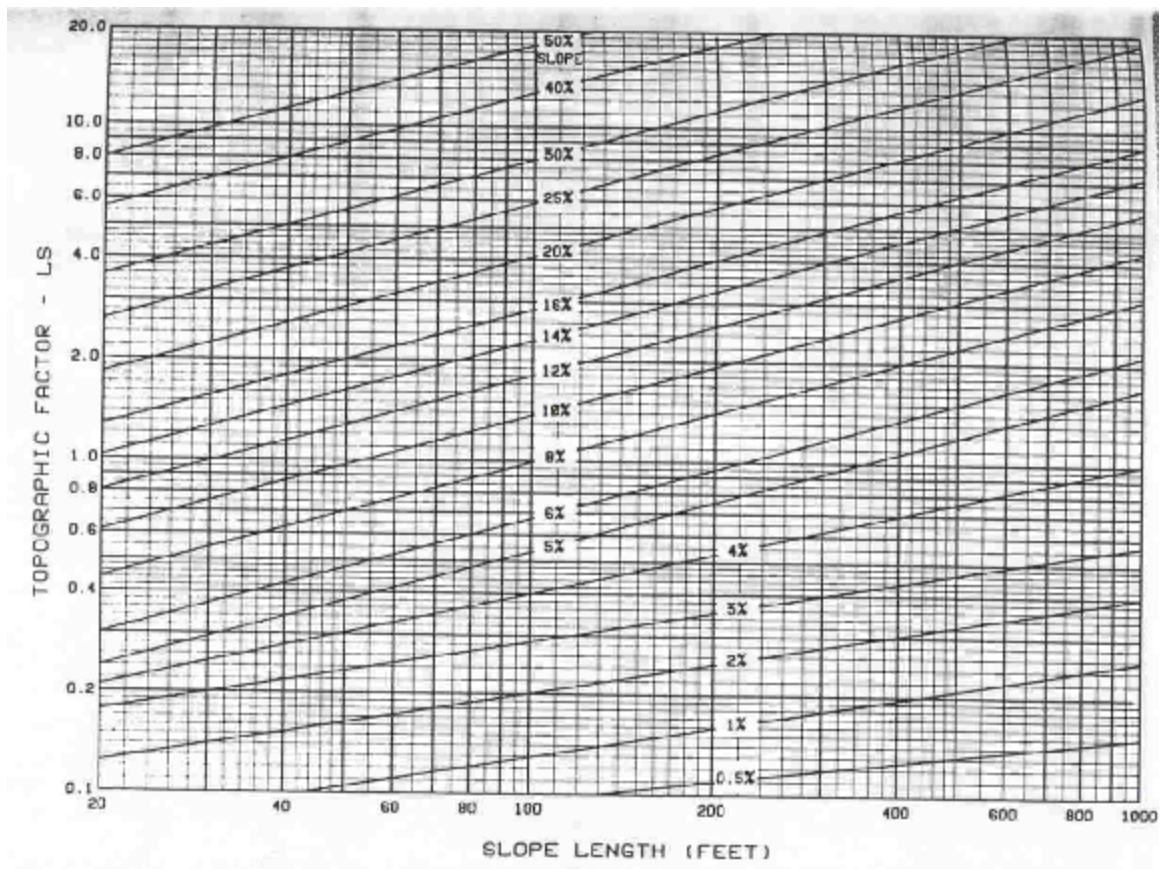
Township B, Section 24

x	y	

2. How many acres are in the area designated by **y**?
- A. 160 acres
 - B. 40 acres
 - C. 80 acres
 - D. 10 acres
3. How long is the Chain/Tape tagged #3?
- A. 66 feet
 - B. 100 feet
 - C. 50 feet
 - D. 75 feet

4. Use a Gunter's Chain to determine the length between points A and B. What is the total distance measured?
- A. 33 feet
 - B. 44 feet
 - C. 55 feet
 - D. 66 feet

5. Using the chart below, for an LS factor of 4.0 and 20 % slope, determine the slope length:
- A. 48 feet
 - B. 56 feet
 - C. 100 feet
 - D. 200 feet



6. Pace the distance between stakes E and F as though it were one side of your field. If the field you are working is rectangular and $\frac{1}{2}$ mile long, how many acres will you need to work?
- A. 2 Acres
 - B. 4 Acres
 - C. 6 Acres
 - D. 8 Acres
7. Use the stadia hairs on the engineers level to determine the distance from the level to point I.
- A. 50 feet
 - B. 60 feet
 - C. 70 feet
 - D. 80 feet
8. Assume the distance between stakes J & K represent the final measurement with the engineer tape. If the head chainman is holding 5 pins and the rear chainman is holding 4 pins, what is the final distance measured.
- A. 528.5 feet
 - B. 228.5 feet
 - C. 529.50 feet
 - D. 429.50 feet
9. Find the area in square feet of the right triangle L-M-N. Side L-M is 60 feet. Based on your pacing, estimate the side M-N and determine the area of the right triangle.
- A. 1000 square feet
 - B. 2000 square feet
 - C. 3000 square feet
 - D. 4000 square feet
10. Use the hand level provided to determine which stake is on the same contour line as stake N.
- A. Stake O
 - B. Stake P
 - C. Stake Q
 - D. Stake R
11. Use the hand level provided to determine the percent slope between S & T if these two stakes are 40 feet apart.
- A. 1 percent
 - B. 3 percent
 - C. 5 percent
 - D. 7 percent

You have just completed a differential leveling activity. The field notes are provided. Use these field notes to determine if the error that is reported is such that you will not have to re-do your work.

12. The allowable error is
 - A. 0.01 ft
 - B. 0.02 ft
 - C. 0.03 ft
 - D. 0.04 ft

13. The actual survey is within
 - A. 0.01 ft
 - B. 0.02 ft
 - C. 0.03 ft
 - D. 0.04 ft

14. Is the Survey acceptable?
 - A. Yes
 - B. No
 - C. There is not enough information to determine.

Surveying Field Notes Differential Leveling

Station	Back-Sight	Height of Instrument	Fore-Sight	Elevation	Distance
B.M. 1	5.62			100.00'	
		105.62			220'
T.P.1	4.87		3.21		299'
					308'
B.M.2	3.64		3.85		318'
					275'
T.P.2	2.30		4.19		202'
					201'
B.M.1			5.16		
Allowable error =					
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