Slope

Slope is defined as a ratio of the change in y to the change in x

It's also described as the (differnce in the y-values)/(difference in x-values), rise/run, grade, pitch, and growth.

Mathematically, we write

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

where *m* is the slope.

Example: Find the slope of the line that connects (3, 4) and (5, 12)

$$m = \frac{12-4}{5-3} = \frac{8}{2} = 4$$

Find the slope of the lines that connects the following points.

1. (2, 3), (3, 8)	**2. (4, 5), (6, 11)**	**3. (1, 7), (5, 9)**
4. (3, 4), (7, 9)	**5. (6, 8), (9, 12)**	**6. (5, 9), 8, 15)**
7. (5, –3), (8, 4)	**8. (6, –2), (10, 5)**	**9. (4, –5), (6, 12)**
10. (5, – 12), (3, –5)	**11. (–2, –8), (–6, 10)**	**12. (1, –5), (–7, 6)**
13. (4, –5), (8, –12)	**14. (-1, –2), (4, 5)**	**15. (-2, 3), (4, –5)**
16. (1, 5), (8, 5)	**17. (3, 11), (-5, 11)**	**18. (0, 8), (10, 8)**
19. (2, 7), (2, 11)	**20. (3, 4), (3, 21)**	**21. (–5, 8), (-5, 11)**

22. Graph the points in each of problems 1-6 to determine the slope by counting .