

Algebra I

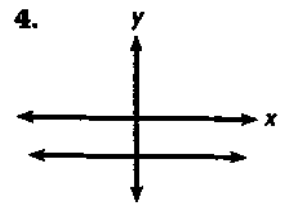
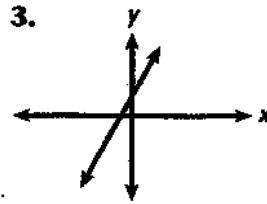
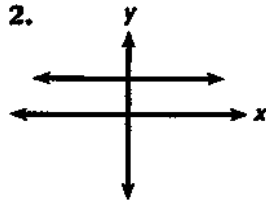
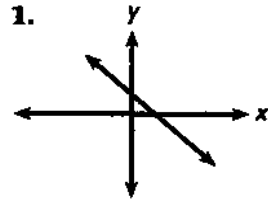
5.3 Worksheet #2

Defining Slope

NAME: _____

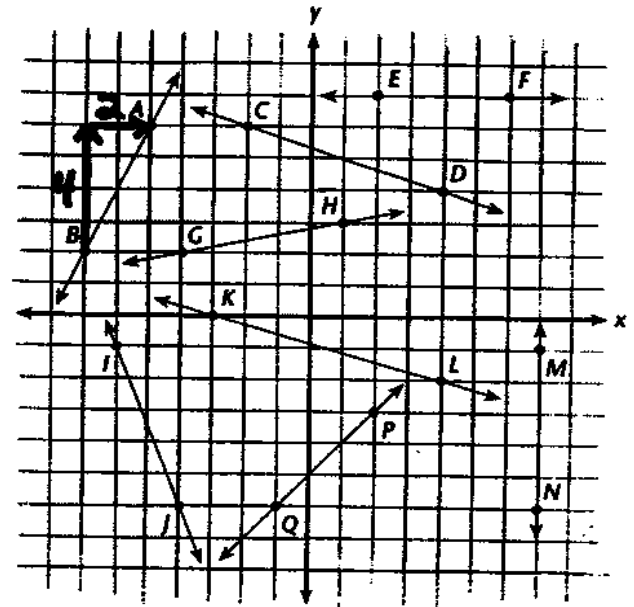
DATE: _____ HOUR: _____

Examine the graphs below. Which lines have a positive slope? Which have a negative slope? Which have neither?



Slope is defined as rise/run. Rise is the difference between the y-coordinates and run is the difference between the x-coordinates.

Use the graph to find the slope of each line.



- | | | |
|------------------------------|------------------------------|------------------------------|
| 5. \overleftrightarrow{AB} | 6. \overleftrightarrow{CD} | 7. \overleftrightarrow{EF} |
| A (-5, 6) | C (,) | E (,) |
| B (-7, 2) | D (,) | F (,) |
| rise = 4 | rise = ____ | rise = ____ |
| run = 2 | run = ____ | run = ____ |
| slope = 2 | slope = ____ | slope = ____ |

- | | | | | |
|------------------------------|------------------------------|-------------------------------|---------------------------------------|-------------------------------|
| 8. \overleftrightarrow{GH} | 9. \overleftrightarrow{IJ} | 10. \overleftrightarrow{KL} | 11. \overleftrightarrow{MN} | 12. \overleftrightarrow{PQ} |
| G (,) | I (,) | K (,) | M (7, -1) | P (,) |
| H (,) | J (,) | L (,) | N (7, -6) | Q (,) |
| rise = ____ | rise = ____ | rise = ____ | rise = -5 | rise = ____ |
| run = ____ | run = ____ | run = ____ | run = 0 | run = ____ |
| slope = ____ | slope = ____ | slope = ____ | slope = \emptyset
does not exist | slope = ____ |

Find the slope for each line.

13. rise -5, run -5

14. rise 2, run 3

15. rise -3, run 4

16. rise -2, run -5

Each pair of points is on a line. What is the slope of each line? Show your work.

17. $A(3, 9), B(1, 5)$ 2

$$m = \frac{5-9}{1-3} = \frac{-4}{-2}$$

18. $A(7, 5), B(2, 4)$ _____

$$m = \text{---} = \text{---}$$

19. $A(-3, 10), B(-5, -4)$ _____

$$m = \text{---} = \text{---}$$

20. $A(5, 2), B(2, -1)$ _____

$$m = \text{---} = \text{---}$$

21. $A(3, -2), B(-1, 3)$ _____

$$m = \text{---} = \text{---}$$

22. $A(-1, 3), B(5, 3)$ _____

$$m = \text{---} = \text{---}$$

23. $A(1, 8), B(-1, 7)$ _____

$$m = \text{---} = \text{---}$$

24. $A(2, 6), B(3, -4)$ _____

$$m = \text{---} = \text{---}$$

25. $A(0, 4), B(3, -2)$ _____

$$m = \text{---} = \text{---}$$

26. $A(6, -1), B(5, 6)$ _____

$$m = \text{---} = \text{---}$$

27. $A(-9, 9), B(7, -2)$ _____

$$m = \text{---} = \text{---}$$

28. $A(3, 7), B(-1, 0)$ _____

$$m = \text{---} = \text{---}$$