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$\stackrel{\text { LIsson }}{3 .}$ Practice B
For use with the lesson "Find Slope and Rate of Change"

Plot the points and draw a line through them. Without calculating, tell whether the slope of the line is positive, negative, zero, or undefined.

1. $(1,-4)$ and $(5,-8)$

2. $(0,-2)$ and $(9,-5)$

3. $(-4,-5)$ and $(-3,-2)$

4. $(-3,6)$ and $(-3,0)$

5. $(7,1)$ and $(-2,1)$

6. $(-7,1)$ and $(-7,-8)$

7. $(-3,3)$ and $(7,-1)$

8. $(-3,-1)$ and $(6,-2)$

9. $(2,-10)$ and $(12,10)$


Find the slope of the line that passes through the points.
10.

11.

12.

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## LESSON 3.4

Practice B
continued
For use with the lesson "Find Slope and Rate of Change"
13.

14.

15.


Find the slope of the line that passes through the points.
16. $(1,2)$ and $(7,7)$
17. $(3,4)$ and $(-5,0)$
18. $(5,-2)$ and $(5,8)$
19. $(3,1)$ and $(-5,3)$
20. (-7, 1) and $(1,5)$
21. $(2,-5)$ and $(5,-2)$
22. $(3,0)$ and $(8,0)$
23. $(-6,-6)$ and $(-2,-2)$
24. $(-5,-4)$ and $(1,-2)$

Find the value of $\boldsymbol{x}$ or $\boldsymbol{y}$ so that the line passing through the two points has the given slope.
25. $(-3, y),(-9,-2) ; m=1$
26. $(-1,4),(x, 3) ; m=\frac{1}{5}$
27. $(8,1),(1, y) ; m=-1$
28. $(x,-7),(1,2) ; m=3$
29. $(9, y),(3,2) ; m=\frac{2}{3}$
30. $(7,5),(x, 2) ; m=\frac{3}{4}$
31. Trolley Bus The table shows the number of trolley buses in operation in the United States during certain years.

| Year | 1980 | 1985 | 1990 | 1995 | 2000 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of buses | 823 | 676 | 832 | 885 | 951 |

a. Describe the rates of change in the number of buses during the time period.
b. Determine the time intervals during which the number of trolley buses showed the greatest and least rates of change.
32. Postage Rate The graph shows the cost (in dollars) to mail a letter that weighs one ounce during certain years.
a. Determine the time interval during which the cost to mail a one-ounce letter showed the greatest rate of change.
b. Determine the time interval during which the

cost to mail a one-ounce letter showed the least rate of change.
33. Heart Rate The graph shows the heart rate of a person during 30 minutes of exercise. Give a verbal description of the workout.


## Algebra 1

