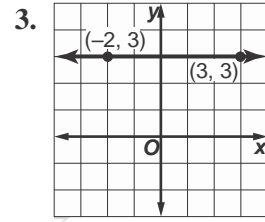
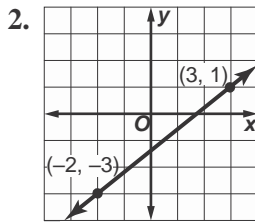
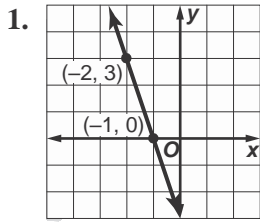


3-3 Practice

Rate of Change and Slope

Find the slope of the line that passes through each pair of points.



- 4. (6, 3), (7, -4)
- 5. (-9, -3), (-7, -5)
- 6. (6, -2), (5, -4)
- 7. (7, -4), (4, 8)
- 8. (-7, 8), (-7, 5)
- 9. (5, 9), (3, 9)
- 10. (15, 2), (-6, 5)
- 11. (3, 9), (-2, 8)
- 12. (-2, -5), (7, 8)
- 13. (12, 10), (12, 5)
- 14. (0.2, -0.9), (0.5, -0.9)
- 15. $(\frac{7}{3}, \frac{4}{3}), (-\frac{1}{3}, \frac{2}{3})$

Find the value of r so the line that passes through each pair of points has the given slope.

- 16. $(-2, r), (6, 7), m = \frac{1}{2}$
- 17. $(-4, 3), (r, 5), m = \frac{1}{4}$
- 18. $(-3, -4), (-5, r), m = -\frac{9}{2}$
- 19. $(-5, r), (1, 3), m = \frac{7}{6}$
- 20. $(1, 4), (r, 5), m$ undefined
- 21. $(-7, 2), (-8, r), m = -5$
- 22. $(r, 7), (11, 8), m = -\frac{1}{5}$
- 23. $(r, 2), (5, r), m = 0$

24. **ROOFING** The *pitch* of a roof is the number of feet the roof rises for each 12 feet horizontally. If a roof has a pitch of 8, what is its slope expressed as a positive number?

25. **SALES** A daily newspaper had 12,125 subscribers when it began publication. Five years later it had 10,100 subscribers. What is the average yearly rate of change in the number of subscribers for the five-year period?