

### GUIDED PRACTICE

#### SEE EXAMPLE 1

p. 341

Graph the line with the given slope that contains the given point.

1. slope = 1; (1, 0)      2. slope = -1; (3, 1)      3. slope = -2; (-4, -2)

#### SEE EXAMPLE 2

p. 342

Write an equation in point-slope form for the line with the given slope that contains the given point.

4. slope =  $\frac{1}{5}$ ; (2, -6)      5. slope = -4; (1, 5)      6. slope = 0; (3, -7)

#### SEE EXAMPLE 3

p. 342

Write an equation in slope-intercept form for the line with the given slope that contains the given point.

7. slope =  $-\frac{1}{3}$ ; (-3, 8)      8. slope = 2; (1, 1)      9. slope =  $\frac{1}{3}$ ; (-6, -2)  
 10. slope = 2; (-1, 1)      11. slope = 3; (2, -7)      12. slope = -4; (4, 2)

#### SEE EXAMPLE 4

p. 343

Write an equation in slope-intercept form for the line through the two points.

13. (-2, 2) and (2, -2)      14. (0, -4) and (1, -6)      15. (1, 1) and (-5, 3)  
 16. (-3, 1) and (0, 10)      17. (7, 8) and (6, 9)      18. (0, -2) and (2, 8)

#### SEE EXAMPLE 5

p. 343

19. **Measurement** An oil tank is being filled at a constant rate. The depth of the oil is a function of the number of minutes the tank has been filling, as shown in the table. Write an equation in slope-intercept form that represents this linear function. Then find the depth of the oil after one-half hour.

Time (min)	Depth (ft)
0	3
10	5
15	6

### PRACTICE AND PROBLEM SOLVING

#### Independent Practice

For Exercises	See Example
20–22	1
23–28	2
29–34	3
35–40	4
41	5

#### Extra Practice

Skills Practice p. S13  
 Application Practice p. S32

Graph the line with the given slope that contains the given point.

20. slope =  $-\frac{1}{2}$ ; (-3, 4)      21. slope =  $\frac{3}{5}$ ; (1, -2)      22. slope = 4; (-1, 0)

Write an equation in point-slope form for the line with the given slope that contains the given point.

23. slope =  $\frac{2}{9}$ ; (-1, 5)      24. slope = 0; (4, -2)      25. slope = 8; (1, 8)  
 26. slope =  $\frac{1}{2}$ ; (-8, 3)      27. slope = 3; (4, 7)      28. slope = -2; (-1, 3)

Write an equation in slope-intercept form for the line with the given slope that contains the given point.

29. slope =  $-\frac{2}{7}$ ; (14, -3)      30. slope =  $\frac{4}{5}$ ; (-15, 1)      31. slope =  $-\frac{1}{4}$ ; (4, -1)  
 32. slope = -6; (9, 3)      33. slope = -5; (2, 3)      34. slope =  $\frac{1}{5}$ ; (-5, -2)

Write an equation in slope-intercept form for the line through the two points.

35. (7, 8) and (-7, 6)      36. (2, 7) and (-4, 4)      37. (-1, 2) and (4, -23)  
 38. (4, -1) and (-8, -10)      39. (0, 11) and (-7, -3)      40. (1, 27) and (-2, 12)