Writing Equations of Lines

2. Given each slope and y-intercept, write the equation of the line, and then graph the line.

a) slope: 1, y-intercept: -1

b) slope: 3, y-intercept: 8

c) slope: $-\frac{2}{3}$, y-intercept: 0

d) slope: 0, y-intercept: -2

5. Determine the equation of each line given the slope and the coordinates of one point on the line.

a) $m = 2$, A(4, 4)

b) $m = 1$, B(3, 7)

c) $m = -3$, C(2, -1)

d) $m = 0$, D(-2, -5)

e) $m = -2$, E(1, 1)

f) $m = 3$, F(-4, -5)

g) $m = 0.5$, G(0, 5)

h) $m = -\frac{3}{2}$, H(-3, 0)

7. Determine the equation of the line passing through the given points.

a) C(2, 2) and D(3, 7)

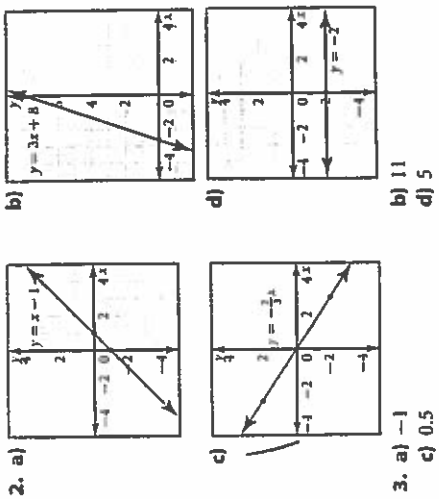
b) J(-1, 4) and K(5, 13)

c) L(0, 0) and M(100, -50)

d) Q(-2, -3) and R(1, 6)

e) U(-9, 0) and V(3, -8)

f) Y(-25, 16) and Z(15, 0)



3. a) -1 c) 0.5

4. a) $y = 40x + 50$ b) 9

5. a) $y = 2x - 4$ b) $y = x + 4$ c) $y = -3x + 5$ d) $y = -5$ e) $y = -2x + 3$ f) $y = 3x + 7$ g) $y = 0.5x + 5$ h) $y = -1.5x - 4.5$

6. a) 2 b) 17 c) 95 d) -33

7. a) $y = 5x - 8$ b) $y = 1.5x + 5.5$ c) $y = \frac{1}{2}x$ d) $y = 3x + 3$ e) $y = -\frac{2}{3}x - 6$ f) $y = -0.4x + 6$