Lesson 6 Skills Practice

Write Linear Equations

Write an equation in point-slope form and slope-intercept form for each line.

1. passes through $(4, 7)$, slope $= 2$
   
   $y - 7 = 2(x - 4)$
   
   $y = 2x - 1$

2. passes through $(-2, -1)$, slope $= 4$
   
   $y + 1 = 4(x + 2)$
   
   $y = 4x + 7$

3. passes through $(8, -4)$, slope $= \frac{1}{2}$
   
   $y + 4 = \frac{1}{2}(x - 8)$
   
   $y = \frac{1}{2}x - 8$

4. passes through $(1, -3)$, slope $= -1$
   
   $y + 3 = -1(x - 1)$
   
   $y = -x - 2$

5. passes through $(-4, -5)$, slope $= -\frac{3}{4}$
   
   $y + 5 = -\frac{3}{4}(x + 4)$
   
   $y = -\frac{3}{4} - 8$

6. passes through $(3, -8)$, slope $= 3$
   
   $y + 8 = 3(x - 3)$
   
   $y = 3x - 17$

7. passes through $(2, -7)$, slope $= 3$
   
   $y + 7 = 3(x - 2)$
   
   $y = 3x - 13$

8. passes through $(-1, -6)$, slope $= -4$
   
   $y + 6 = -4(x + 1)$
   
   $y = -4x - 10$