Name:_____   Period:_____Date:_____

Writing Linear Equations   Answers

Section I. Write an equation of the line using the given information in A) Slope Intercept Form and B) Standard Form.

1. $m = -6,$ $b = 4$

   $y = -6x + 4$

2. $m = \frac{3}{4},$ $b = -4$

   $y = \frac{3}{4}x - 4$

3. $m = 0,$ $b = -7$

   $y = -7$

4. $m = -\frac{3}{2},$ $b = \frac{1}{4}$

   $y = -\frac{3}{2}x + \frac{1}{4}$

Section II. Write an equation of the line using the given information in A) Slope Intercept Form and B) Standard Form.

5. $m = 3, and\ passes\ thru\ (-2, 6)$

   A) $y = 3x + 12$
   B) $3x - y = -12$

6. $m = 2, and\ passes\ thru\ (-5, -7)$

   A) $y = 2x + 3$
   B) $2x - y = -3$

7. $m = \frac{3}{2}, and\ passes\ thru\ (0, 6)$

   A) $y = \frac{3}{2}x + 6$
   B) $3x - 2y = -12$

8. $m = undefined, and\ passes\ thru\ (-6, 11)$

   A) $x = -6$
   B) $x = -6$

9. $m = -4, and\ passes\ thru\ (5, -12)$

   A) $y = -4x + 8$
   B) $4x + y = 8$

10. $m = \frac{-2}{3}, and\ passes\ thru\ (9, -13)$

   A) $y = -\frac{2}{3}x + 7$
   B) $2x + 3y = 21$

11. $m = -\frac{3}{8}, and\ passes\ thru\ (16,\ 0)$

   A) $y = -\frac{3}{8}x + 6$
   B) $3x + 8y = 48$

12. $m = 0, and\ passes\ thru\ (-9, 14)$

   A) $y = 14$
   B) $y = 14$

Section III. Write an equation of the line using the given information in A) Point – Slope Form B) Slope Intercept Form and C) Standard Form.

13. $(-9,-11)$ and $(6,-1)$

A) $y + 1 = \frac{2}{3}(x - 6)$ or $y + 11 = \frac{2}{3}(x + 9)$

B) $y = \frac{2}{3}x - 5$

C) $2x - 3y = 5$

14. $(0, 10)$ and $(-3, 8)$

A) $y - 8 = \frac{2}{3}(x + 3)$ or $y - 10 = \frac{2}{3}x$

B) $y = \frac{2}{3}x + 10$

C) $2x - 3y = -10$

15. $(1, 1)$ and $(4, 7)$

A) $y - 7 = 2(x - 4)$ or $y - 1 = 2(x - 1)$

B) $y = 2x - 1$

C) $2x - y = 1$

16. $(6, 3)$ and $(-3, -3)$

A) $y + 3 = \frac{2}{3}(x + 3)$ or $y - 3 = \frac{2}{3}(x - 6)$

B) $y = \frac{2}{3}x - 1$

C) $2x - 3y = 1$

17. $(-1, 3)$ and $(2, 6)$

A) $y - 6 = 1(x - 2)$ or $y - 3 = 1(x + 1)$

B) $y = x + 4$

C) $x - y = -4$

18. $(-4, 2)$ and $(2, 1)$

A) $y - 1 = -\frac{1}{6}(x - 2)$ or $y - 2 = -\frac{1}{6}(x + 4)$

B) $y = -\frac{1}{6}x + \frac{4}{3}$

C) $x - 6y = -8$

19. $(6, -1)$ and $(-6, 9)$

A) $y - 9 = -\frac{5}{6}(x + 6)$ or $y + 1 = -\frac{5}{6}(x - 6)$

B) $y = -\frac{5}{6}x + 4$

C) $5x + 6y = 24$

20. $(7, -2)$ and $(-5, -2)$

A) $y + 2 = 0(x + 5)$ or $y + 2 = 0(x - 7)$

B) $y = -2$

C) $y = -2$