

Weekly Review #16

Name: _____ Class: _____ Score: ____ /10 \bar{x} = _____Due Date #1: **Tues. 2/3** Due Date #2: **Fri. 2/6** (Regardless of whether you have class.)1.) Which point lies on the graph of the system?
$$\begin{cases} 3y = 3 \\ x + 2y = 4 \end{cases}$$

- (A) (3,1) (C) (2,1)
(B) (4,1) (D) (1.5,1)

2.) Multiply: $(11x - 9)(11x + 9)$

- (A) $121x^2 + 99x - 81$ (C) $11x^2 - 81$
(B) $11x^2 - 18$ (D) $121x^2 - 81$

3.) Which linear equation's graph has the steepest slope?

- (A) $x + 15y = -10$ (C) $4x - 12y = 8$
(B) $-3x + 6y = -12$ (D) $x - 9y = 27$

4.) Multiply: $(2a^2 + 5a + 3)(a^2 - 3a - 4)$

- (A) $2a^4 - 11a^3 - 26a^2 - 29a - 12$
(B) $2a^4 + a^3 - 20a^2 - 29a - 12$
(C) $2a^4 + 5a^3 - 26a^2 - 29a - 12$
(D) $2a^4 - a^3 - 20a^2 - 29a - 12$

5.) A linear regression equation is $y = 4.7x + 51$. A point in the scatter plot that created this equation is (5,90). What is the residual associated with the point where $x = 5$?

- (A) 164.5 (C) 15.5
(B) 74.5 (D) 15

6.) Find the standard deviation of the data below.

22, 24, 15, 18, 27, 16, 23, 20, 19, 26

- (A) 3.87 (C) 4.08
(B) 3.94 (D) 4.12

7.) Which notation describes $\{-2, -1, 0, 1, 2, 3\}$

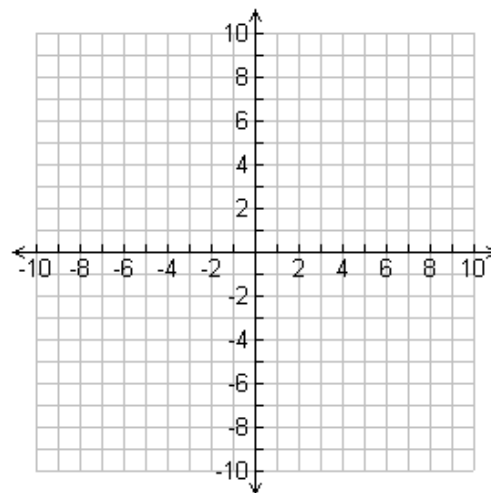
- (A) $\{x \mid -3 \leq x \leq 3, \text{ where } x \text{ is an integer}\}$ (C) $\{x \mid -3 < x \leq 4, \text{ where } x \text{ is an integer}\}$
(B) $\{x \mid -2 < x < 3, \text{ where } x \text{ is an integer}\}$ (D) $\{x \mid -2 \leq x < 4, \text{ where } x \text{ is an integer}\}$

8.) Factor completely: $49 - 36x^2y^2$

9.) Solve this system of inequalities, and label the solution area S:

$$2x + 3y - 9 \geq 0$$

$$-x - y - 6 > 0$$



10.) The bases on a baseball diamond (which is a square) are 90 feet apart. How far is it from home plate to second base?