Notes

1 ⓐ $y = 4x$ ⓑ $x + y = 10$

$x + (4x) = 10$

$\frac{5x}{5} = \frac{10}{5}$

$x = 2$

(2, 8)

ⓑ $(2) + y = 10$

$-2 \quad -2$

$y = 8$

2 ⓐ $y = -7x$ ⓑ $4x + y = 12$

$4x + (-7x) = 12$

$\frac{-3x}{-3} = \frac{12}{-3}$

$x = -4$

ⓐ $y = -7(-4)$

$y = 28$

(-4, 28)

ⓑ $4(-4) + y = 12$

$-16 + y = 12$

$+16 \quad +16$

$y = 28$

3 ⓐ $y = -x + 3$ ⓑ $3y - 1 = 5x$

$3(-x + 3) - 1 = 5x$

$-3x + 9 - 1 = 5x$

$-3x + 8 = 5x$

$+3x \quad +3x$

$\frac{8}{8} = \frac{8x}{8}$

$1 = x$

$y = -x + 3$

$y = -(1) + 3$

$y = 2$

(1, 2)

4 ⓐ $y = -8x$ ⓑ $2x + y = -6$

$2x + (-8x) = -6$

$\frac{-6x}{-6} = \frac{-6}{-6}$

$1x = 1$

(,)

you finish

Name_____

5.2 (B) Systems Of Equations—Solve by substitution.

Solve by substitution.

1. $y = -3x$
   $y - x = -8$

2. $y = -2x$
   $4x + y = 10$

3. $y = x - 2$
   $x + y = 12$

4. $y = -7x$
   $4x + y = -12$

5. $y = 3x$
   $y - 2x = 7$

6. $y = -x + 3$
   $3y - 1 = 5x$

Solve by substitution.

7. $y = 6x$
   $3x + y = 9$

8. $y = 2x$
   $2x + y = 24$

9. $y = -5x$
   $y - 6x = 11$

10. $y = -2x$
    $y - 8x = -10$

11. $y = -2x$
    $y - x = -12$

12. $y = -2x$
    $y - 2x = -20$