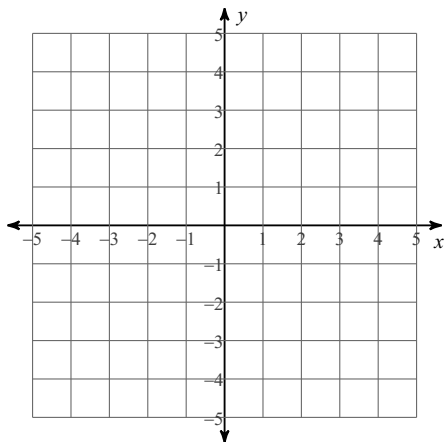


Practice Test Unit 3

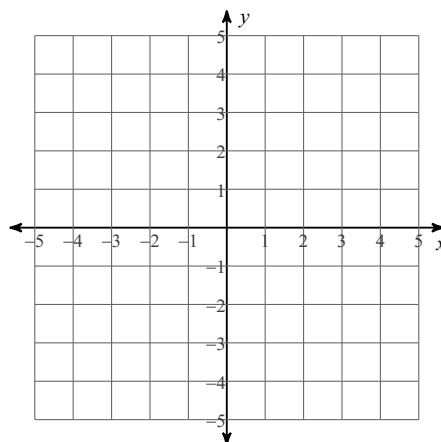
Period _____

Solve each system by graphing.

$$1) \begin{aligned} -6 + 2y &= x \\ -6 + 6y - 9x &= 0 \end{aligned}$$



$$2) \begin{aligned} -\frac{3}{8}x &= -1 - \frac{1}{4}y \\ 0 &= -4y + 6x - 8 \end{aligned}$$

**Solve each system by elimination.**

$$3) \begin{aligned} -x &= -4y + 15 \\ 1 - \frac{2}{11}y &= -\frac{1}{11}x \end{aligned}$$

$$4) \begin{aligned} 8 &= 7x - 8y \\ 8y &= 7x - 8 \end{aligned}$$

$$5) \begin{aligned} 4y + 16 - 8x &= 0 \\ -5y &= -4x + 20 \end{aligned}$$

$$6) \begin{aligned} -\frac{3}{5}y &= x + \frac{4}{5} \\ 4 &= -4y - 8x \end{aligned}$$

Solve each system by substitution.

$$7) \begin{aligned} y &= x \\ y &= -2x + 3 \end{aligned}$$

$$8) \begin{aligned} -2x - 2y &= -8 \\ y &= 6x - 3 \end{aligned}$$

$$9) \begin{aligned} 2x + 12y &= -3 \\ x + 6y &= 0 \end{aligned}$$

$$10) \begin{aligned} y &= -4 \\ -3x + 3y &= -18 \end{aligned}$$

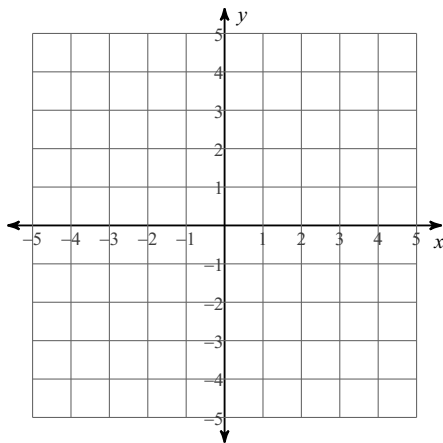
11) Castel and Ndiba each improved their yards by planting daylilies and ivy. They bought their supplies from the same store. Castel spent \$55 on 3 daylilies and 5 pots of ivy. Ndiba spent \$41 on 5 daylilies and 2 pots of ivy. Find the cost of one daylily and the cost of one pot of ivy.

12) The senior classes at High School A and High School B planned separate trips to Yellowstone National Park. The senior class at High School A rented and filled 4 vans and 4 buses with 136 students. High School B rented and filled 3 vans and 6 buses with 168 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.

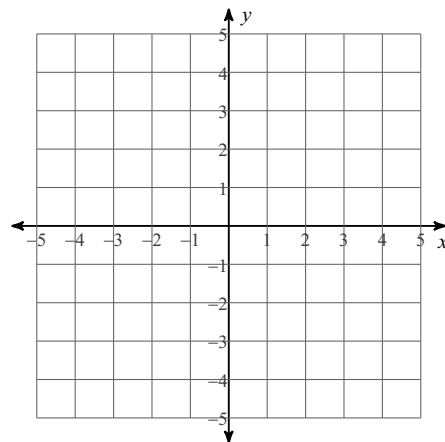
Sketch the solution to each system of inequalities.

13) $y < -\frac{5}{2}x + 3$

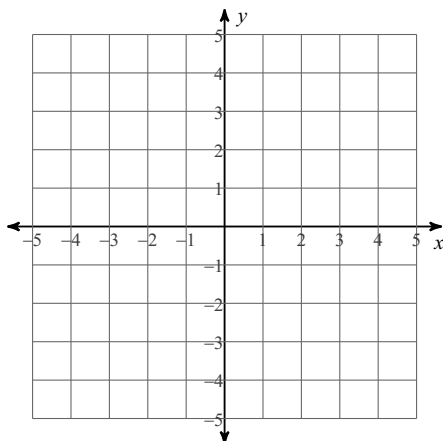
$y > \frac{1}{2}x - 3$



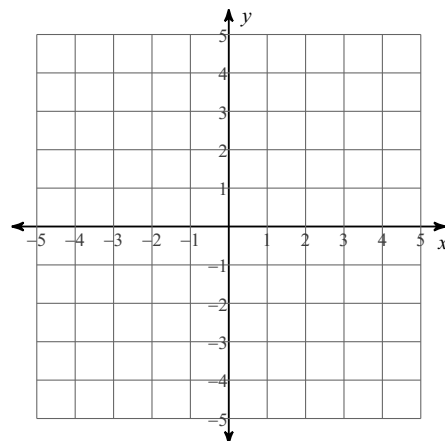
14) $y \leq x - 2$
 $y > -2x + 1$



15) $5x + 3y \geq 6$
 $y > -3$



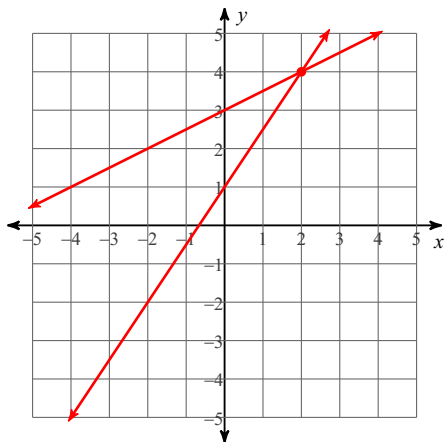
16) $5x + 3y \geq 9$
 $x > 3$



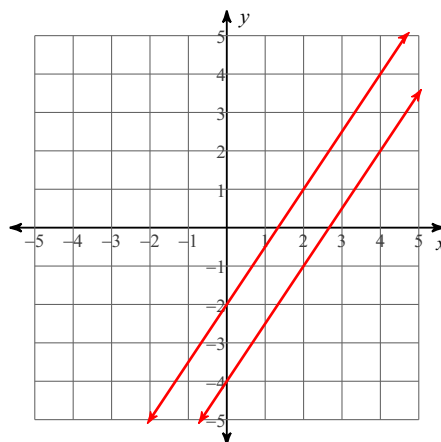
Practice Test Unit 3

Solve each system by graphing.

$$1) \begin{aligned} -6 + 2y &= x \\ -6 + 6y - 9x &= 0 \end{aligned}$$

 $(2, 4)$

$$2) \begin{aligned} -\frac{3}{8}x &= -1 - \frac{1}{4}y \\ 0 &= -4y + 6x - 8 \end{aligned}$$



No solution

Solve each system by elimination.

$$3) \begin{aligned} -x &= -4y + 15 \\ 1 - \frac{2}{11}y &= -\frac{1}{11}x \end{aligned}$$

 $(-7, 2)$

$$4) \begin{aligned} 8 &= 7x - 8y \\ 8y &= 7x - 8 \end{aligned}$$

Infinite number of solutions

$$5) \begin{aligned} 4y + 16 - 8x &= 0 \\ -5y &= -4x + 20 \end{aligned}$$

 $(0, -4)$

$$6) \begin{aligned} -\frac{3}{5}y &= x + \frac{4}{5} \\ 4 &= -4y - 8x \end{aligned}$$

 $(1, -3)$

Solve each system by substitution.

$$7) \begin{aligned} y &= x \\ y &= -2x + 3 \end{aligned}$$

 $(1, 1)$

$$8) \begin{aligned} -2x - 2y &= -8 \\ y &= 6x - 3 \end{aligned}$$

 $(1, 3)$

$$9) \begin{aligned} 2x + 12y &= -3 \\ x + 6y &= 0 \end{aligned}$$

No solution

$$10) \begin{aligned} y &= -4 \\ -3x + 3y &= -18 \end{aligned}$$

 $(2, -4)$

- 11) Castel and Ndiba each improved their yards by planting daylilies and ivy. They bought their supplies from the same store. Castel spent \$55 on 3 daylilies and 5 pots of ivy. Ndiba spent \$41 on 5 daylilies and 2 pots of ivy. Find the cost of one daylily and the cost of one pot of ivy.

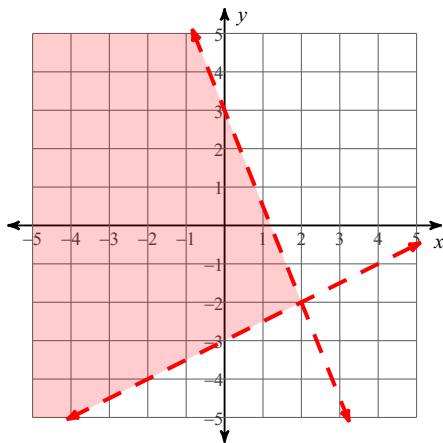
daylily: \$5, pot of ivy: \$8

- 12) The senior classes at High School A and High School B planned separate trips to Yellowstone National Park. The senior class at High School A rented and filled 4 vans and 4 buses with 136 students. High School B rented and filled 3 vans and 6 buses with 168 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.

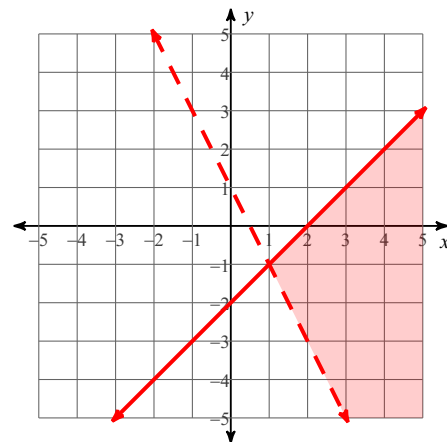
Van: 12, Bus: 22

Sketch the solution to each system of inequalities.

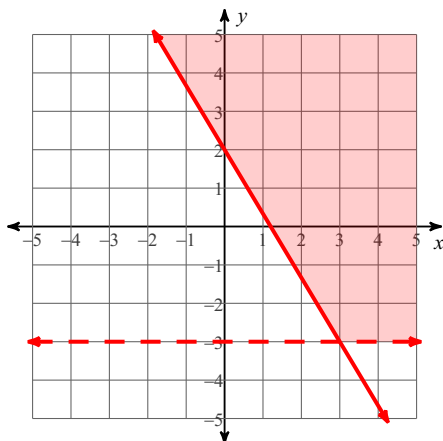
13) $y < -\frac{5}{2}x + 3$
 $y > \frac{1}{2}x - 3$



14) $y \leq x - 2$
 $y > -2x + 1$



15) $5x + 3y \geq 6$
 $y > -3$



16) $5x + 3y \geq 9$
 $x > 3$

