

WS Unit 4 Test Review

Solve each system by graphing.

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

$y = \frac{1}{3}x - 3$

2) $y = -7x - 3$
 $y = -x + 3$

3) $x + 4y = -12$
 $2x + y = 4$

4) $y = 3$
 $x - y = 1$

Solve each system by elimination.

5) $3x + 4y = 13$
 $9x - 2y = -17$

6) $3x + 2y = 0$
 $2x - 6y = 0$

7) $6x - y = -7$
 $-x + 4y = 28$

8) $9x + 9y = 29$
 $-6x - 6y = -24$

$$\begin{aligned} 9) \quad & -3x + 5y = -27 \\ & -7x + 2y = 24 \end{aligned}$$

$$\begin{aligned} 10) \quad & 7x + 6y = 18 \\ & -9x - 10y = -30 \end{aligned}$$

Solve each system by substitution.

$$\begin{aligned} 11) \quad & y = 2x - 3 \\ & -4x + 8y = 24 \end{aligned}$$

$$\begin{aligned} 12) \quad & y = -8x - 8 \\ & -4x + 3y = -24 \end{aligned}$$

$$\begin{aligned} 13) \quad & y = 2x - 5 \\ & 2x - y = 5 \end{aligned}$$

$$\begin{aligned} 14) \quad & y = 2x + 5 \\ & y = -6x + 13 \end{aligned}$$

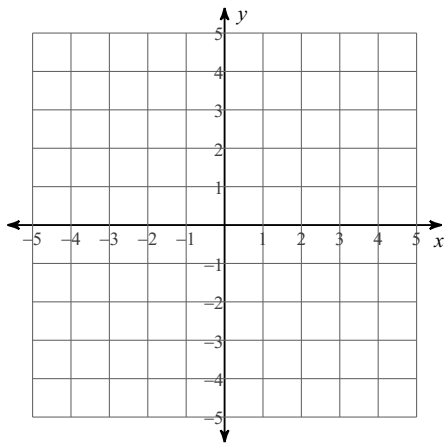
$$\begin{aligned} 15) \quad & -8x - 3y = -10 \\ & x - 5y = 12 \end{aligned}$$

$$\begin{aligned} 16) \quad & x - 7y = -18 \\ & -4x - 4y = 8 \end{aligned}$$

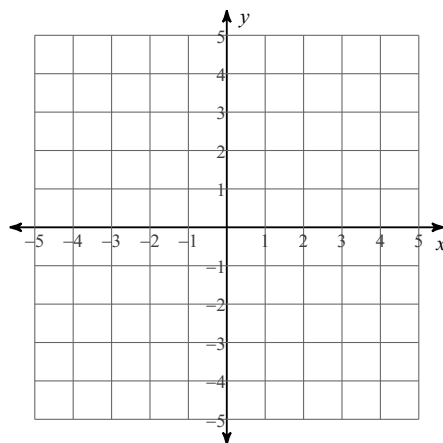
- 17) The state fair is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 7 vans and 12 buses with 720 students. High School B rented and filled 14 vans and 7 buses with 539 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
- 18) Kayla's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 10 senior citizen tickets and 7 child tickets for a total of \$220. The school took in \$240 on the second day by selling 8 senior citizen tickets and 12 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
- 19) A jar contains quarters and dimes for a total of \$6.15. There are a total of 33 coins in the jar. How many of each are in the jar?

Sketch the solution to each system of inequalities.

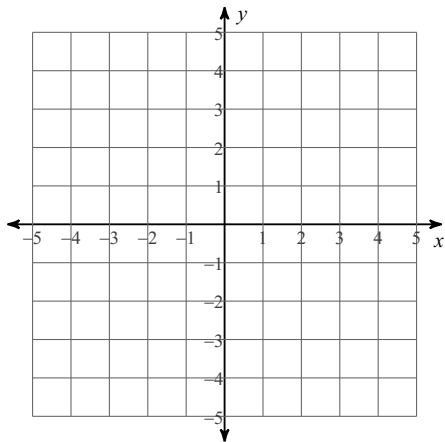
20) $y > -2x + 2$
 $y > -\frac{1}{2}x - 1$



21) $y \leq \frac{1}{2}x + 3$
 $y \geq -\frac{3}{2}x - 1$



22) $y > -5x + 3$
 $y < x - 3$



23) $y \geq -x + 2$
 $y > 3x - 2$

