

Quarter 2 assessment review-ch 7

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Date _____ block _____

Solve each system by elimination.

$$\begin{aligned} 1) \quad & 2x - y = -2 \\ & -3x + y = 0 \end{aligned}$$

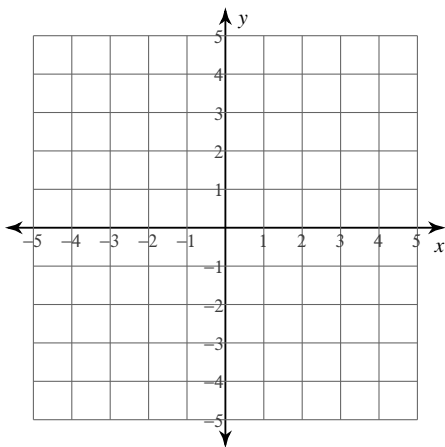
$$\begin{aligned} 2) \quad & -3x - y = -7 \\ & -2x + y = -3 \end{aligned}$$

$$\begin{aligned} 3) \quad & 20x + y = 1 \\ & 10x - 2y = -2 \end{aligned}$$

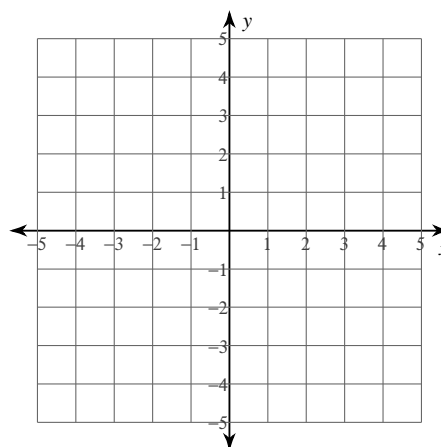
$$\begin{aligned} 4) \quad & -14x + 10y = 18 \\ & -7x + y = -15 \end{aligned}$$

Solve each system by graphing.

$$\begin{aligned} 5) \quad & y = \frac{3}{2}x - 4 \\ & y = -\frac{3}{2}x + 2 \end{aligned}$$

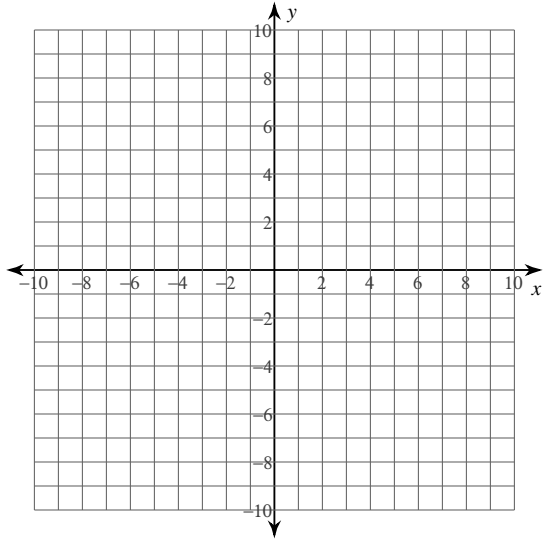


$$\begin{aligned} 6) \quad & y = 5x - 1 \\ & y = x + 3 \end{aligned}$$



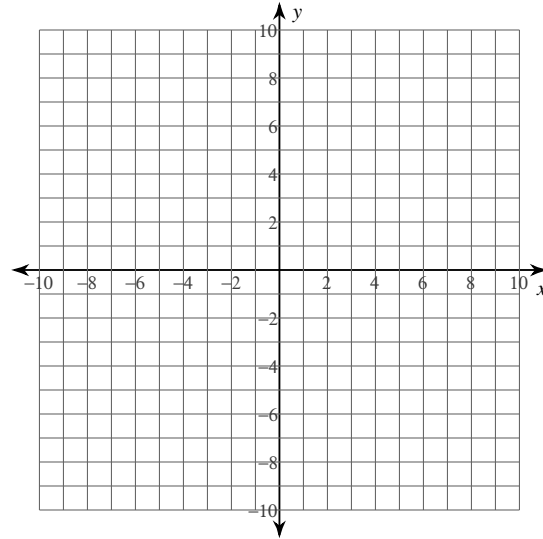
$$7) \quad 14 = -2y + \frac{28}{3}x$$

$$-21 = 3y - 14x$$



$$8) \quad -\frac{7}{5} - \frac{1}{5}y = -x$$

$$x = 5 - y$$



Solve each system by substitution.

$$9) \quad y = x - 6$$

$$y = -3x + 10$$

$$10) \quad 3x + 7y = -9$$

$$x + 2y = -2$$

$$11) \quad 7x - 6y = -20$$

$$-3x + 8y = -24$$

$$12) \quad 8x - 6y = -10$$

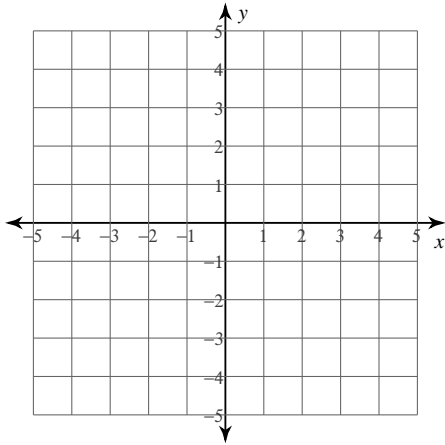
$$5x - 5y = 0$$

- 13) Sarawong and Gabriella are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Sarawong sold 5 small boxes of oranges and 6 large boxes of oranges for a total of \$171. Gabriella sold 5 small boxes of oranges and 2 large boxes of oranges for a total of \$107. Find the cost each of one small box of oranges and one large box of oranges.
- 14) Kristin and Pranav are selling pies for a school fundraiser. Customers can buy blueberry pies and pumpkin pies. Kristin sold 3 blueberry pies and 8 pumpkin pies for a total of \$117. Pranav sold 3 blueberry pies and 2 pumpkin pies for a total of \$45. What is the cost each of one blueberry pie and one pumpkin pie?
- 15) Carlos' school is selling tickets to a spring musical. On the first day of ticket sales the school sold 2 adult tickets and 4 child tickets for a total of \$64. The school took in \$170 on the second day by selling 11 adult tickets and 8 child tickets. Find the price of an adult ticket and the price of a child ticket.
- 16) Micaela and Jenny each improved their yards by planting daylilies and shrubs. They bought their supplies from the same store. Micaela spent \$56 on 6 daylilies and 1 shrub. Jenny spent \$27 on 1 daylily and 9 shrubs. What is the cost of one daylily and the cost of one shrub?

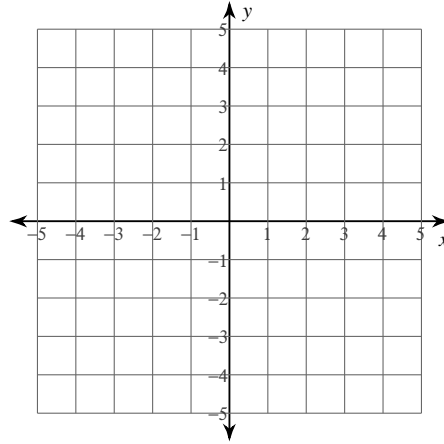
- 17) Willie and Mark each improved their yards by planting daylilies and geraniums. They bought their supplies from the same store. Willie spent \$121 on 5 daylilies and 9 geraniums. Mark spent \$216 on 9 daylilies and 16 geraniums. What is the cost of one daylily and the cost of one geranium?

Sketch the solution to each system of inequalities.

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

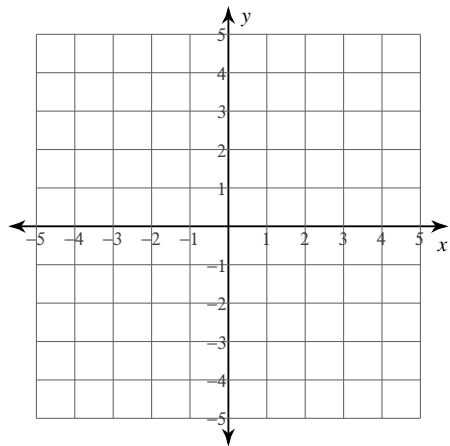


19) $y < -2x - 3$
 $y \leq 2x + 1$



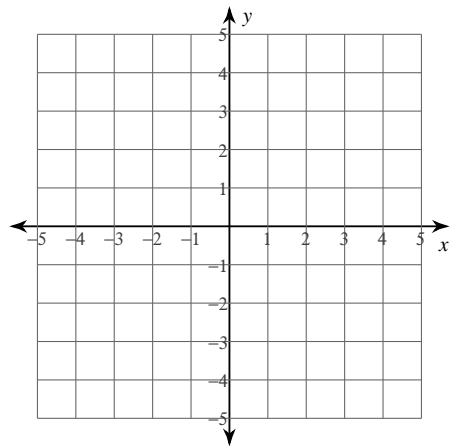
20) $y \leq x + 1$

$y \leq -\frac{1}{2}x - 2$



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

$y < 2x - 2$



Answers to Quarter 2 assessment review-ch 7

- | | | | |
|--|---|---------------------------------|--------------|
| 1) (2, 6) | 2) (2, 1) | 3) (0, 1) | 4) (3, 6) |
| 5) (2, -1) | 6) (1, 4) | 7) Infinite number of solutions | |
| 8) (2, 3) | 9) (4, -2) | 10) (4, -3) | 11) (-8, -6) |
| 12) (-5, -5) | | | |
| 13) small box of oranges: \$15, large box of oranges: \$16 | | | |
| 14) blueberry pie: \$7, pumpkin pie: \$12 | 15) adult ticket: \$6, child ticket: \$13 | | |
| 16) daylily: \$9, shrub: \$2 | 17) daylily: \$8, geranium: \$9 | 18) | |

