

Ch 7 Review 2

Date _____ Period _____

Solve each system by elimination.

1)
$$\begin{aligned} 4x + 8y &= 8 \\ -5x - 8y &= 0 \end{aligned}$$

2)
$$\begin{aligned} 7x - 5y &= 16 \\ -7x - y &= 20 \end{aligned}$$

3)
$$\begin{aligned} -4x + 2y &= 22 \\ 2x - 10y &= -2 \end{aligned}$$

4)
$$\begin{aligned} -4x + 2y &= 0 \\ 2x - 6y &= -30 \end{aligned}$$

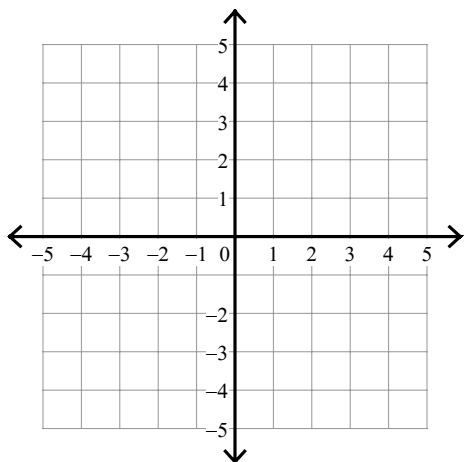
5)
$$\begin{aligned} -6x + 4y &= 4 \\ 12x - 8y &= -8 \end{aligned}$$

6)
$$\begin{aligned} -7x - 6y &= -5 \\ 14x + 12y &= -16 \end{aligned}$$

Sketch the solution to each system of inequalities.

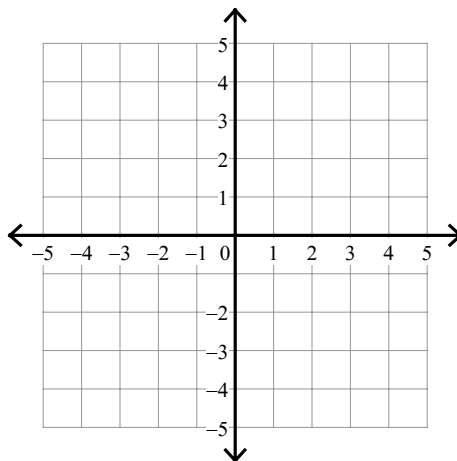
7) $y > \frac{5}{3}x + 3$

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



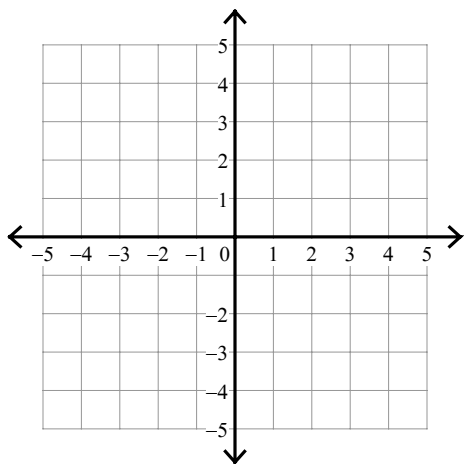
8) $y > 5x + 2$

$y < x - 2$



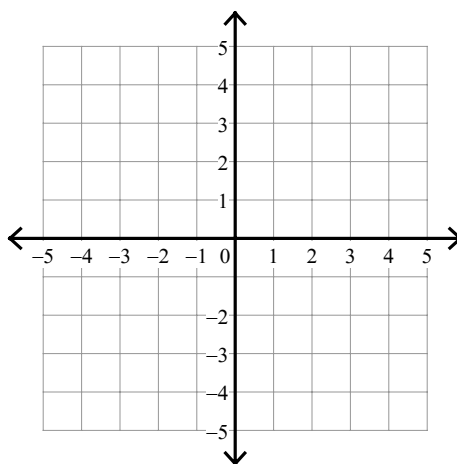
9) $y \geq -3$

$y > 2x - 1$



10) $y \leq 3$

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



11) Stefan and Jacob are selling fruit for a school fundraiser. Customers can buy small boxes of grapefruit and large boxes of grapefruit. A small box costs \$9 and a large box costs \$16. If 17 boxes sold for a total of \$237, how many of each size box was sold?

12) ASB is selling cheesecakes for a school fundraiser. Customers can buy New York style cheesecakes for \$12 and \$14 for strawberry cheesecakes. 32 cakes sold for a total of \$426. How many strawberry cheesecakes were sold?

13) Paul's school is selling tickets to a spring musical. Adult tickets cost \$7 and student tickets cost \$6. The school took in \$261 by selling 40 tickets on the first day. How many adult tickets were sold on the first day?

Answers to Ch 7 Review 2 (ID: 1)

1) $(-8, 5)$

2) $(-2, -6)$

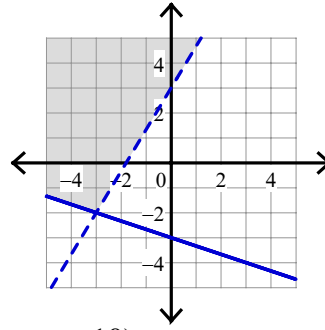
3) $(-6, -1)$

4) $(3, 6)$

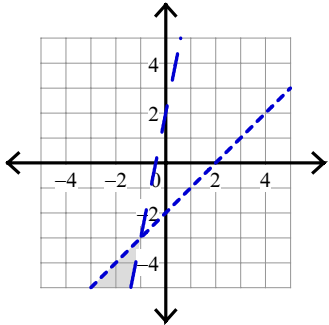
5) Infinite number of solutions

6) No solution

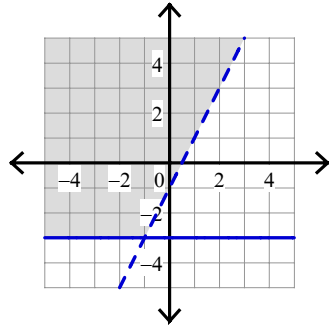
7)



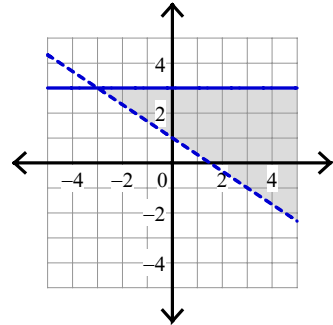
8)



9)



10)



11) 5 small boxes, 12 large boxes

12) 21 strawberry cheesecakes

13) 21 adult tickets