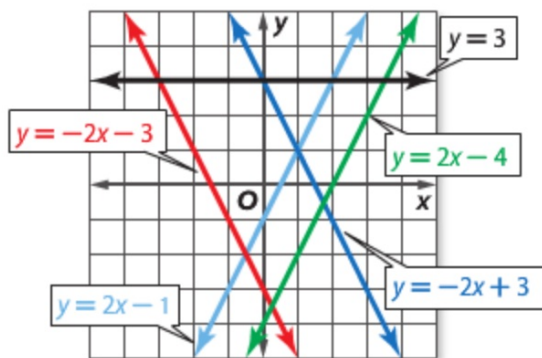


Algebra 1 MCT review
Solve systems by graphing
Solve systems using substitution
Solve systems using elimination

Quiz today 6.3-6.4

Test Fri. 6.1-6.4

Use the graph to determine whether each system is *consistent* or *inconsistent* and if it is *independent* or *dependent*. (Lesson 6-1)



1. $y = 2x - 1$
 $y = -2x + 3$

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

Graph each system and determine the number of solutions that it has. If it has one solution, name it. (Lesson 6-1)

3. $y = 2x - 3$
 $y = x + 4$

4. $x + y = 6$
 $x - y = 4$

Use substitution to solve each system of equations.

(Lesson 6-2)

9. $y = x + 4$
 $2x + y = 16$

10. $y = -2x - 3$
 $x + y = 9$

13. **FOOD** The cost of two meals at a restaurant is shown in the table below. (Lesson 6-2)

| Meal | Total Cost |
|---------------------|------------|
| 3 tacos, 2 burritos | \$7.40 |
| 4 tacos, 1 burrito | \$6.45 |

- Define variables to represent the cost of a taco and the cost of a burrito.
- Write a system of equations to find the cost of a single taco and a single burrito.
- Solve the systems of equations, and explain what the solution means.
- How much would a customer pay for 2 tacos and 2 burritos?

15. **MULTIPLE CHOICE** Angelina spent \$16 for 12 pieces of candy to take to a meeting. Each chocolate bar costs \$2, and each lollipop costs \$1. Determine how many of each she bought. (Lesson 6-3)

$$\begin{array}{l} (4, 8) \\ 2c + 1L = 16 \quad \$ \\ c + L = 12 \quad \# \end{array} \xrightarrow{-1} \begin{array}{l} -c + L = -12 \\ 2c + L = 16 \\ \hline c = 4 \end{array}$$
$$\begin{array}{l} 8 + L = 16 \\ -8 \quad -8 \end{array}$$

Use elimination to solve each system of equations.

(Lessons 6-3 and 6-4)

16. $x + y = 9$
 $x - y = -3$

$$3 - 6 = -3$$

$$\frac{2x}{2} = \frac{6}{2}$$

$$x = 3$$

$(3, 6)$ $5 + 14 = 19$

😊

$$x + 3 \cdot 2 = 11$$

$$x + 6 = 11$$
$$-6 \quad -6$$

😊 $(5, 2)$

17. $x + 3y = 11$
 $x + 7y = 19$

$$\begin{array}{r} -1x - 3y = -11 \\ x + 7y = 19 \\ \hline \end{array}$$

$$\frac{4y}{4} = \frac{8}{4}$$

$$y = 2$$

$$4 \cdot 160 + y = 765$$

160 adults

20. **MULTIPLE CHOICE** The Blue Mountain High School Drama Club is selling tickets to their spring musical. Adult tickets are \$4 and student tickets are \$1. A total of 285 tickets are sold for \$765. How many of each type of ticket are sold?

125 students

(Lesson 6-4)

$$4x + 4y = 765$$

$$- 1x + 1y = 285$$

$$3x = 480$$

$$x = 160$$

\$

$$x + y = 285$$

$$160 + y = 285$$

$$-160 \quad -160$$

| | D | R | T |
|---------|-----|-----|---|
| with | 450 | P+W | 2 |
| against | 450 | P-W | 3 |