

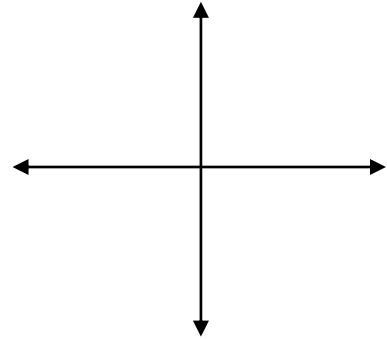
**SOLVING SYSTEMS OF EQUATIONS**



Use your calculator to determine the solution to the following system of equations:  $5y = 6 + 2x$   
 $3x - 2y = 13$

Matrices:

Graphing:



**MATCH TO THE GRAPH**

Solve each equation for "y" then match to the graph.

System	Solve for y	Match to the graph
1. $x - y = 2$ $y = -x + 5$	$y = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$	Graph _____
2. $y = -x + 2$ $x - y = 5$	$y = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$	Graph _____
3. $y = x + 2$ $-x - y = 5$	$y = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$	Graph _____

For each problem below, set up a system of equations. **DO NOT SOLVE.**

4. A school principal ordered 100 pizzas for a total of \$1255. Cheese pizzas cost \$11.50 each and pepperoni pizzas cost \$13.00 each. How many cheese pizzas and pepperoni pizzas did the principal order?

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

5. At a restaurant, the cost for a breakfast taco and a small glass of milk is \$2.10. The cost for 2 tacos and 3 small glasses of milk is \$5.15. Find the cost of a taco.

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

6. The Frosty Ice-Cream Shop sells sundaes for \$2 and banana splits for \$3. On a hot summer day, the shop sold 8 more sundaes than banana splits and made \$156. How many sundaes and banana splits did the shop sell that day?

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

7. The perimeter of a rectangular wooden deck is 90 feet. The deck's length is 5 feet less than 4 times its width. Determine the dimensions of the wooden deck.

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

**Solve the system of equations.**

8. A delivery van has a fixed cost for travel and a charge per mile. If a 6-mile trip costs \$6.90 and an 11-mile trip costs \$11.40, what is the fixed cost?

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

9. An apartment building contained 52 units consisting of one-bedroom apartments which rented for \$320 per month each and two-bedroom apartments which rented for \$400 per month each. If the building was fully rented and the total monthly rental was \$18400, how many apartments of each type were in the building?

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

10. Jane and David picked 81 quarts of berries at King's Orchard. If David picked 6 more than twice the number of quarts Jane picked, how many quarts did Jane pick?

Define variables:

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_