

Algebra 1 Agenda

Don't forget the last page!!

				Stamp
Monday	1/12/2015	Objective:	Introduction to Systems of Equations	
		Assignment:	Practice #1 - 7	
Tuesday	1/13/2015	Objective:	Writing Systems	
		Assignment:	Practice #1 - 6	
Wednesday	1/14/2015	Objective:	Setting up Systems	
		Assignment:	Exit Ticket	
Thursday	1/15/2015	Objective:	Solving Systems by Substitution	
		Assignment:	Practice #1 - 11	
Friday	1/16/2015	Objective:	Systems Applications	
		Assignment:	Activity Sheet	

Be...work

Week of _____ - _____

Name: _____

Period: _____

Monday

thursday

Tuesday

Friday

Wednesday

CHALLENGE

Practice – Intro to Systems

No textbook correlation

Name _____ Date _____ Period _____

Determine if the given point is a solution to the equation.

1. $(-3, 6)$ $2x - y = -12$
 $3x + 2y = -3$

2. $(-1, -4)$ $3y = x - 11$
 $-2x + y = -2$

3. $(4, 1)$ $x + 2y = 6$
 $x - y = 3$

4. $(2, 1)$ $2x - 5y = -1$
 $3x - 4y = -2$

Determine the number of solutions for each system. Write "one", "none" or "infinite".

5. $y = \frac{2}{3}x - 5$
 $3y = 2x$

6. $3x + y = 3$
 $2y = -6x + 6$

7. $x + 2y = 5$
 $2x + 4y = 2$

Practice – Writing Systems of Equations**No textbook correlation**

Name _____ Date _____ Period _____

Write the Let Statements and derive a system of equations that could be used to solve each problem.

1. The admission fee at a small fair is \$1.50 for children and \$4.00 for adults. On certain day, 2200 people enter the fair and \$5050 is collected. How many children and how many adults attended?

Let Statements

2. The treasurer of the student body at a college reported that the receipts from a recent concert totaled \$916. Furthermore, he announced that 560 people had attended the concert. Students were charged \$1.25 each for admission to the concert, and adults were charged \$2.25 each. How many adults attended the concert?

Let Statements

3. Elle went to Pet Smart and bought 4 goldfish and 3 turtles for \$28. Later that day, Warren went to Pet Smart and bought 6 goldfish and 1 turtle for \$10. How much does 1 goldfish cost?

Let Statements

4. The perimeter of a rectangle is 40. The width is four less than 5 times the length. Find the dimensions of the rectangle.

Let Statements

5. The school track team earned \$2 for every hat they sold and \$5 for every sweatshirt they sold. The total profits were \$317. If they sold 1 more of the hats than of the sweatshirts, which system could be used to find how many sweatshirts they sold?

Let Statements

6. A boy has seven more nickels than quarters. The total value of the coins is \$4.90. Which system could be used to find how many nickels and quarters he has?

A $n = 7 + q$
 $0.05n + 0.25q = 4.90$

B. $n = 7q$
 $n + q = 4.90$

$q = 7 + n$
C. $0.05n + 0.25q = 4.90$

D. $n = 7 + q$
 $n + q = 4.90$

Practice – Solving Systems by Substitution

pp 390-396

Name _____ Date _____ Period _____

Find the solution for each system of linear equations.

1.
$$\begin{aligned} y &= 2x \\ x + y &= 12 \end{aligned}$$

2.
$$\begin{aligned} y &= 2x - 5 \\ 4x + y &= 7 \end{aligned}$$

3.
$$\begin{aligned} x - y &= 2 \\ 4x - 3y &= 11 \end{aligned}$$

4.
$$\begin{aligned} m + t &= 2.10 \\ 2m - 3t &= 5.15 \end{aligned}$$

5. The equations of two lines are $2x - 3y = 12$ and $x = 4y + 1$. What is the value of x in the solution for this system of equations?

Find the solution for each system of linear equations.

6.
$$\begin{aligned} 4y + x &= 5 \\ x + 4y &= 10 \end{aligned}$$

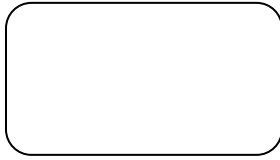
7. If $\begin{aligned} -2x + 3y &= 14 \\ x + 2y &= 7 \end{aligned}$, then $x - y = ?$

Algebra I - Unit 6: Topic 2 – Solving Systems by Substitution

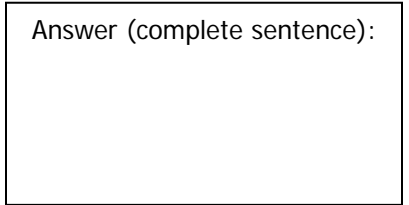
Find the solution for each system of linear equations.

8. Tyler is six years older than his sister, and the sum of their ages is 32. How old is Tyler? How old is his sister?

Let Statements



Answer (complete sentence):



9. What mistake was made in solving the following system of equations?

$$\begin{array}{l} -3x + y = -4 \\ 3y = 15x + 6 \end{array} \longrightarrow y = 3x - 4$$

Step 1: $3(3x - 4) = 15x + 6$

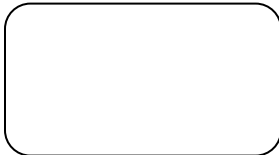
Step 2: $9x - 12 = 15x + 6$

Step 3: $6 = 24x$

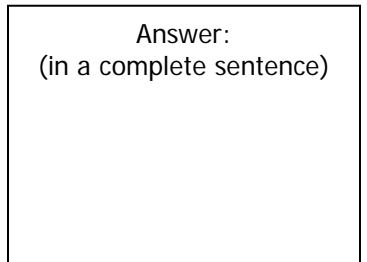
Step 4: $\frac{1}{4} = x$

- A Did not solve for y correctly
B Did not distribute correctly in Step 1
C Should have subtracted $9x$ from $15x$ in Step 2
D No mistake was made
10. At the Cinema Snakshak, one customer bought 3 large popcorn buckets and 2 small drinks for a total of \$21.00. Another customer bought one large popcorn bucket and 4 small drinks for a total of \$17.00. Find the cost of a large popcorn.

Let Statements



Answer:
(in a complete sentence)



11. Given the equations $y - 3x = 8$ and $3x = 2y + 7$, what would you substitute for y in the equation $3x = 2y + 7$?

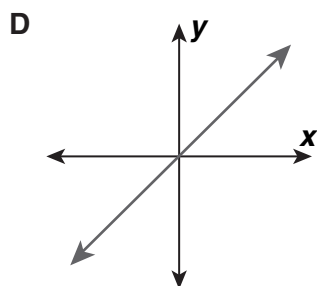
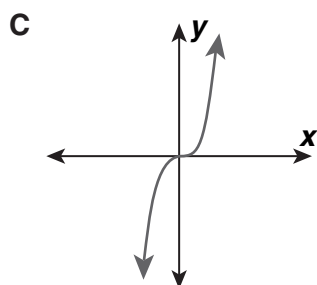
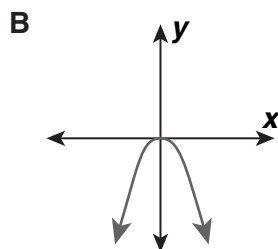
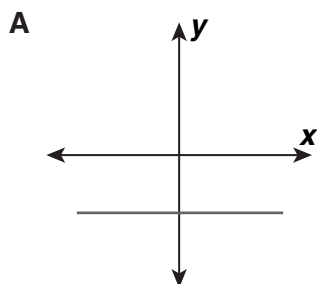
- A $8 - 3x$
B $\frac{8}{3}x$
C $8 + 3x$
D $8 \bullet 3x$

Test Preparation Practice**Algebra 1**

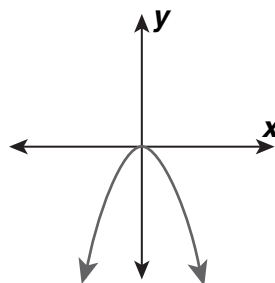
A.2.A Identify and sketch the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions.

Solve each problem. Choose the best answer for each question and record your answer on the Student Answer Sheet. Figures are not drawn to scale

1. Which is the best representation of the function $y = x$?

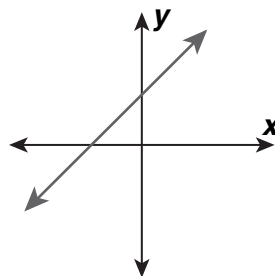


2. The graph of the function shown is a transformation of what type of parent function?



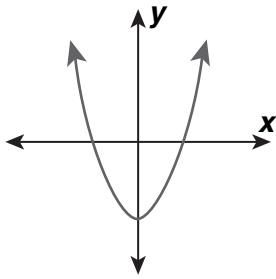
- F** Linear
G Absolute value
H Quadratic
J Exponential

3. Which equation is the parent function of the graph represented below?



- A** $y = |x|$
B $y = x$
C $y = x^2$
D $y = \sqrt{x}$

4. Which equation is the parent function of the graph represented below?

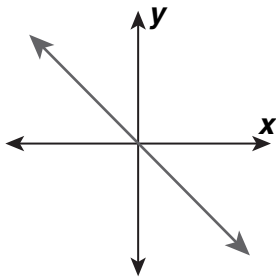


- F** $y = |x|$
G $y = x$
H $y = x^2$
J $y = \sqrt{x}$

5. Which of the functions is NOT linear?

- A** $5y + 6 = 8$
B $y = \frac{1}{x} - 3$
C $y = \frac{1}{3}x - 4$
D $y = 4(x + 6) - 3$

6. Which equation is the parent function of the graph shown?



- F** $y = x^2$
G $y = \sqrt{x}$
H $y = x$
J $y = 2x$

7. Which graph is the best representation of the function $y = x^2$?

