HW: Ticket To The Test – Systems of Equations REVIEW

What are the three types of solutions?

1) _____ **solution** is when your answer looks like this "x = #"

2) _____ **solution** is when your answer looks like this "5 ≠ 7" (False statement)

3) _____ **solutions** is when your answer looks like this "-6 = -6" (True statement)

Use substitution when you have an equation with _____ or _____. Substitute that value in for that variable in the other equation, then solve for the remaining variable!
Example: Solve the following system of equations for the value of x and y. Show all steps neatly. Write your solution as an ordered pair.

$-3x + 3y = 12$
$y = x + 4$

Use elimination when you have an equation with like terms lined up. Look for _____ coefficients. If you do not have any, _____ an entire equation to create opposite coefficients. Then, add all like terms and solve for the remaining variable.
Example: Solve the following system of equations for the value of x and y. Show all steps neatly. Write your solution as an ordered pair.

$-2x + y = 4$
$-8x + 2y = 16$

In word problems, look for 2 things the situation is dealing with. Write an equation for each set of information (you can find this by the totals). Write a let statement unless specifically told variables to use.
Example: Write a system of equation to represent the following situation and solve it find the answer.

Lucia wants to go ice skating. She must pay for admission and then rent ice skates. Rates for two rinks near her home are shown below.

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If you need
More space!**

Ice Plex	Skate World
$5 for admission plus $2 per hour for skate rental	$10 for admission plus $1 per hour for skate rental

For how many hours of skate rentals will the cost be the same at both skating rinks?

Equations: **Ice Plex:** _____

Skate World: _____