Name_____ Pd_____ Date_____ **Section 1.C.7**

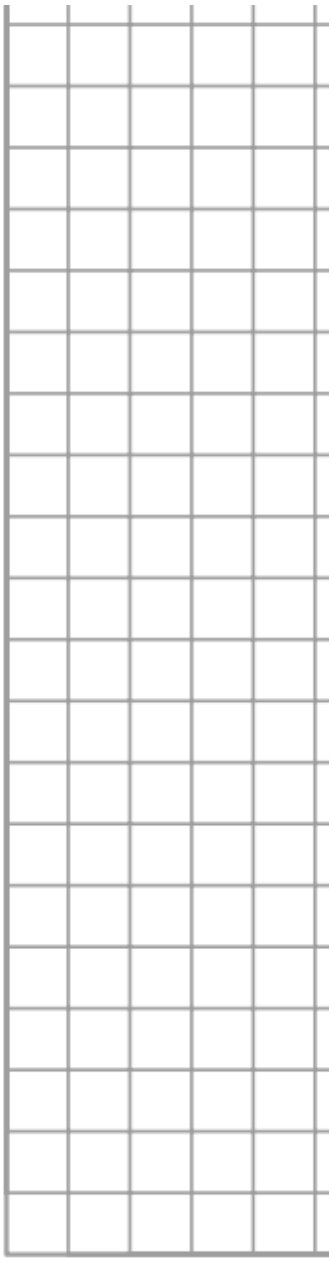
Sam's gym has a registration fee of $10, plus he pays $3 for every visit.
Write a linear equation for his gym expenses. Make a table. Make a graph.

X:	**Y:**

Ciara's gym has a registration fee of $14, but she only pays $1 for every visit.
Write a linear equation for his gym expenses. Make a table. Make a graph.

X:	**Y:**

After how many visits would Sam and Ciara have spent the same amount on their gym memberships? Find the answer by setting the equations equal to each other. Confirm your answer with the table and the graph.



**KEY IDEA: When you solve an equation with variables on both sides, you are finding the solution

algebraically:

graphically:

on the table:

Special Solutions

1) Solve. $10x + 12 = 2(5x + 6)$ 2) Solve. $3(4b - 2) = 10b - 6 + 2b$ 3) What do you notice about your solutions? 4) What do you notice about the original equations (after you simplify but before you solve)?	1) Solve. $9m - 4 = -3m + 5 + 12m$ 2) Solve. $3 + 2x + 4 = -(3 - 2x)$ 3) What do you notice about your solutions? 4) What do you notice about the original equations (after you simplify but before you solve)?
<u>Key Ideas</u> - Equations that look _____ _____ on both sides are called _____. - They have _____ solutions. _____, when you plug it in, would make the equation _____.	<u>Key Ideas</u> - Equations that have _____ variable terms but _____ constant terms are called _____. - They have _____ solutions. _____, when you plug it in, would make the equation _____.