Ready, Set, Go!

Ready

Topic: Solve literal equations

Solve each equation for *x*. Justify each step.

1. $ax = d$

2. $b + cx = d$

3. $ab + cx = d$

Set

Topic: Solve literal equations or writing linear equations in slope-intercept form

Rearrange the following equations to solve for y (slope-intercept form).

4. $4x + y = 3$

5. $2y = 6x + 9$

6. $5x - 2y = 10$

7. $3x + 6y = 25$

8. $x - 8y = 12$

9. $3x - 7y = 20$

Go

Topic: Create and solve equations for real world problems

Create an equation that describes each of the situations below, then solve.

10. The cost of a birthday party at Classic Boon is $200 plus $4 per person. The cost for Fletcher's party came to $324. How many people came to his party?

11. A cell phone company charges $55 per month for unlimited minutes plus $0.25 per text sent. If the charges to Dayne's cell phone for last month came to $100, how many texts did Aly send?

12. Aly has baked an apple pie and wants to sell it in her bakery. She is going to cut it into 12 slices and sell them individually. She wants to sell it for three times the cost of making it. The ingredients cost $8.50, and she allowed $1.25 to cover the cost of electricity to bake it. Find the values for each of the following questions:

   a)   What is the amount Aly will charge for each slice of pie?

   b)   What is the total amount she will gross if she sells the entire pie?

   c)   What will be the profit if she sells the entire pie?

Need Help? Check out these related videos:

Solve and justify two step equations using properties of equality http://www.youtube.com/watch?v=WXzpisUh0AU

Rearrange equations to highlight a variable: solve literal equations
 http://www.khanacademy.org/math/algebra/solving-linear-equations/v/example-of-solving-for-a-variable