Ready, Set, Go!

Ready

Topic: Solve one variable equations

Determine the value of x that makes each equation true.

1. $6x = 18$

2. $3x - 10 = 2$

3. $8x - 10 = x + 11$
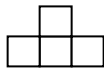
4. $5x - 7 = 7x - 17$

5. $3x + 9 = 44 - 2x$

6. $3x + 6 = x + 2$
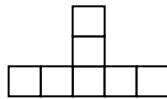
Set

Topic: Create and solve equations in one variable.

Step 1   Step 2   Step 3

7. Each square represents one tile, how many total tiles are in Step 5? Step 6?
8. How can you determine the number of tiles in Step 25?
9. Write a rule to predict the total number of tiles for any step. Show how your rule relates to the pattern.
10. Try to think of a different rule that you can use to predict the total number of tiles for any step. Show how your rule relates to the pattern.
11. Andrew also solved this problem and came up with following equation: s = 1 + 3(n-1). How does each piece of his expression show up in the pattern?
12. Tami came up with the equation s = 3n − 2. How does each piece of her expression show up in the pattern?
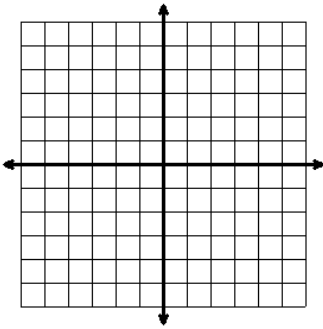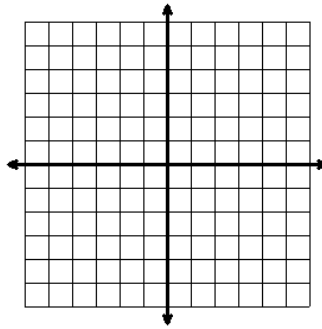
Go

Topic: Graph linear equations

For the following problems, two points and a slope are given. Use the graph to plot these points, draw the line, and clearly label the slope.
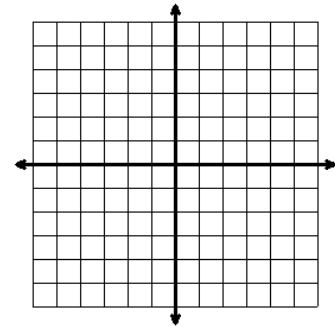
13. (2, -1) and (4, 2); m = $\frac{3}{2}$ 14. (-2, 1) and (2, 5); m = 1   15. (0, 0) and (3, 6); m = 2
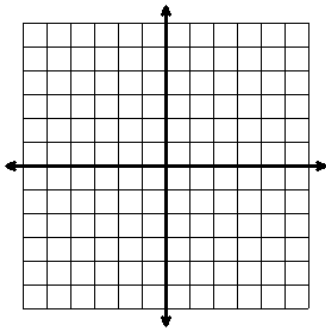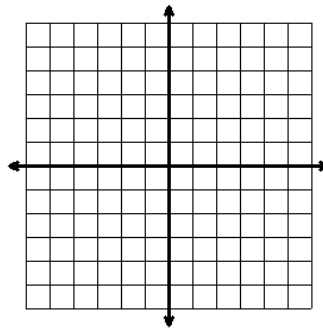
For the following problems, two points are given. Use the graph to plot these points and determine the slope.

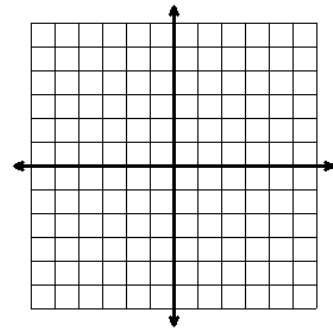16. (-3, 0) and (0, 5); m =   17. (-2, -1) and (-4, 4); m =   18. (0, 3) and (1, 6); m =

Need Help? Online resources that may be helpful:

http://www.khanacademy.org/math/algebra/solving-linear-equations/v/solving-equations-1

http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/graphing-a-line-in-slope-intercept-form

http://www.youtube.com/watch?v=WXzpisUh0AU