Name_____Period_____

Review sheet on multi-step equations – 8.EE.7

Show ALL steps in solving the equations below. Worth 1, 2, or 3 points each. If infinite solutions, write "infinite" and if no solution, write "no solution."
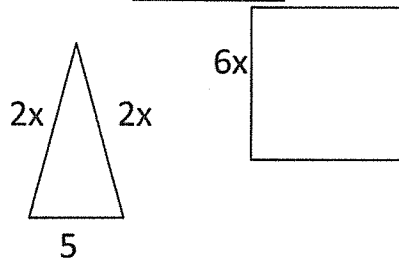
1) $5x + 14 = -3x - 2$	2) $4(2x + 1) = -2x + 4 + 10x$
3) $\frac{5}{6}x - 2 + \frac{1}{3}x = \frac{1}{2}$	4) $14 - (3 - 2x) = 7x + 5$
5) $2 + 3(x + 6) = 4(x + 2)$	6) $4.7x + 90 = 5.6x + 2.1x$
7) $\frac{3}{2}x + 3 + 4 = 4x - \frac{5}{2}x - 7$	8) $-8 + x + 2 = -3x - 2x$
9) $2x + 6y = 12$; solve for y	10) $V = lwh$; solve for h

For each of the following, write and solve an equation.

11) The perimeter of a rectangular garden is 72 feet. It's length is three times its width. How wide and how long is the garden? Draw a picture to help you. Then write an equation and solve.

12) The square and the triangle have equal perimeters. Find the <u>perimeter</u> of each.

Not drawn to scale.

2x / \ 2x

6x

5

13) Print-o-rama charges a $25 setup fee and $8 per shirt. Printastic charges a $64 set up fee and $5 per shirt. For what number of shirts do the companies charge the same amount? What would the charge be?

14) Three consecutive even integers have a sum of 102. Write and solve an equation to figure out the three integers.

15) You rent a canoe for $5 per hour. Your cost before the tax is $12.50. Write an solve an equation to find the number of hours you rented the canoe.