Lesson # 50

Solving 2-Step Equations

Date

Warmup

#1-4 Solve and Check

1.

$p + 8 = 14$

2.

$\frac{z}{5} = 30$

3.

$x - 2 = 6.5$

4.

$2y = 17$

5. Twice a number increased by two is ten. What is the number? (use guess and check or another problem solving method)

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I. Solving 2-Step Equations

II. Solving 1-Step Equations with Integers and Real Numbers

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Pre-Algebra and Geometry I
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I. Solving 2-Step Equations

The equations in the Warmup each have 1 operation.

They are 1-step equations.

$p + 8 = 14$

$\frac{z}{5} = 30$

$x - 2 = 6.5$

$2y = 17$

To Solve a 2-Step Equation: Work backwards to 'undo' the operations to isolate the variable.

$$2n + 2 = 10$$

1. Put a box around the variable term.
2. Determine what must be done to result in the variable term on one side of the equation and everything else on the other side.
3. Work step by step to 'isolate' the variable.
4. Check the solution.

$4x - 3 = 9$

6. $6x + 8 = 62$

$5 - 2x = 13$

7. $9 - 3x = 3$

$\frac{x}{3}+5=15$

8. $\frac{a}{4}+6=18$

$$16 = \frac{8+s}{2}$$

9. $10 = \frac{7+b}{4}$

II. Solving 1-Step Equations with Integers and Real Numbers

Solve for c:

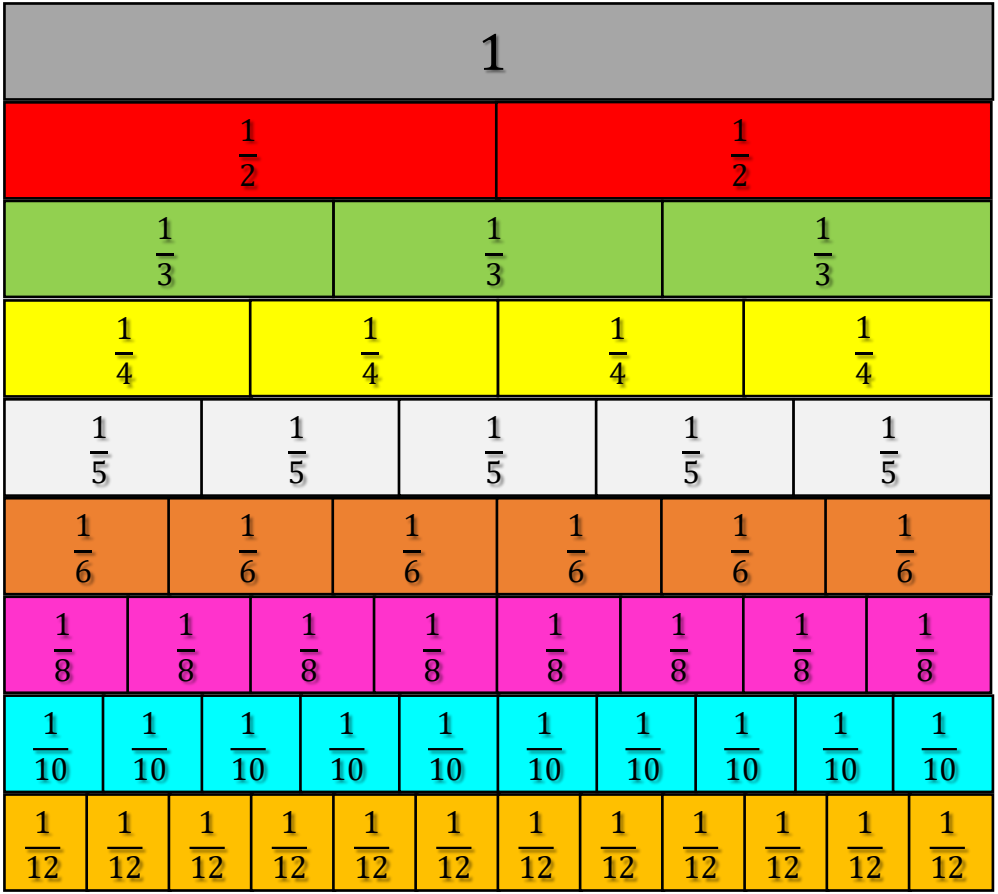
$5.5c = -36.85$

Attention

If you have been solving equations in your head, and now realize these questions are difficult. It is suggested you return to Lesson 13, and Lesson 18 to learn and use the steps for solving 1-step equations.

10. $\frac{t}{-4} = 28$

11. $p - -6 = 11$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