

SC Algebra 1
2.1 - Writing and Interpreting Equations

Warm Up:

Multiply or Divide. You may use a calculator, or just calcu-now.

1. $1.3(-12)$

2. $2\frac{1}{4}\left(-3\frac{1}{8}\right)$

3. $-5.6 \div 7$

4. $-\frac{150}{2.5}$

5. Clayton is making cakes for a bake sale at school when he realizes that he is running out of milk. Each cake requires $\frac{1}{4}$ cup of milk. If Clayton has $3\frac{3}{4}$ cups of milk, how many cakes can he make?

Speak Like A Mathematician:

solution:

equivalent equations:

Examples 1 and 2: Solving Equations - Level 1

$$g - 25 = 113$$

$$27 + k = 30$$

$$13 = -22 + y$$

$$a + 26 = 35$$

$$\frac{2}{3} + w = 1\frac{1}{2}$$

$$14 = 26 + t$$

**Mr. Nappier's Easy-Button
Equation Rules:**

1. Think **OUTSIDE** the box.
2. Equations **MUST** remain equal.
3. Opposites make **ZERO**.
4. Quick Check with Substitution.
5. Side by Side? You must **DIVIDE**.

Example 3: Write a One-Step Equation

- In tennis, the Grand Slam tournaments are the four most prestigious annual events. At one point in his career, Roger Federer had won three more Grand Slam singles titles than Rafael Nadal. If at that time, Roger Federer held the record for the most Grand Slam singles titles won with 17, write and solve an equation to determine how many Grand Slam singles titles had Nadal won?
- On average, a male bulldog weighs 15 pounds less than a male golden retriever. If the average male bulldog weighs 50 pounds, write and solve an equation to find the average weight of a male golden retriever.

Example 4: Solve Equations - Level 2

$$42 = -14y$$

$$6y = 54$$

$$\frac{3}{8}x = \frac{9}{4}$$

$$9 = -\frac{3}{2}z$$

$$-16 = -\frac{b}{2}$$

$$\frac{a}{7} = -\frac{5}{14}$$

Mr. Nappier's Easy-Button Equation Rules:

1. Think OUTSIDE the box.
2. Equations MUST remain equal.
3. Opposites make ZERO.
4. Quick Check with Substitution.
5. Side by Side? You must DIVIDE.