One Step Equations

(Integers)

Important Rules for Solving Equations

- When you solve an equation, your goal is to get the _____ alone by itself on one side of the equation. In other words, you are trying to _____ the variable.

- When you are solving for a variable, you MUST use inverse _____.

- Draw a line to separate both sides of the equation.

Important Rules for Solving Equations (Continued)

- Whatever you do to _____ of an equation, you must do to the _____ side of the equation. In other words, you must keep the equation _____.

Think of solving an equation like lifting weights

- If you add or subtract weight from one side of the barbell, you must _____ or _____ weight from the other side to keep it balanced!

Solve: **-2p = 6**

- To solve, you must isolate the variable.

- What number is on the same side as **p**?

- To get **p** by itself, we must undo the multiplication. What is the opposite of multiplication?

$$-2p = 6$$

1. Draw a line to separate the equation into 2 sides.

2. _____ by ____ on both sides.

3. Check your answer by substituting your answer back into the problem.

$$\frac{z}{-2} = 14$$

1. Draw a line to separate the equation into 2 sides.

2. _____ by ____ on both sides.

3. Check your answer by substituting your answer back into the problem.

Solve: $-x = -4$

Check Your Answer:

Solve: $-g = 16$

Check Your Answer:

Solve: $-16 = -4b$

Check Your Answer:

Solve: $\frac{x}{6} = -29$

Check Your Answer:

Solve: $\frac{-x}{8} = 16$

Check Your Answer:

Solve: $-28 = 7n$

Check Your Answer:

Solve: **r + 16 = -7**

- To solve, you must isolate the variable.
- What number is on the same side as **r**?
- To get **r** by itself, we must undo the addition. What is the opposite of addition?

$r + 16 = -7$

1. Draw a line to separate the equation into 2 sides.
2. _____ ____ from both sides.
3. Check your answer by substituting your answer back into the problem.

Solve: $y + (-3) = -8$

Check Your Answer:

Solve: $x - (-2) = 1$

Check Your Answer:

Solve: $-11 = t + (-2)$

Check Your Answer:

Solve: $x - (-18) = 24$

Check Your Answer:

Solve: $-22 = c - 12$

Check Your Answer:

Solve: $-14 + n = -21$

Check Your Answer: