Math Antics
Worksheets

Name: _____

Date: _____

Solving 2-Step Equations - Set 1

Instructions: Solve each equation.

1 $4x + 7 = 15$
$$ -7 \quad -7$$
$$\frac{4x}{4} = \frac{8}{4}$$
$$x = 2$$

2 $2x - 4 = 10$

3 $6 + 3x = 15$

4 $25 = 4 + 7x$

5 $41 = 8x - 23$

6 $5x - 12 = 18$

7 $9x + 7 = 88$

8 $25 = 3x - 8$

9 $1 + 10x = 91$

10 $16 = 12 + 4x$

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Solving 2-Step Equations (with Groups)

Instructions: Solve each equation.

1 $$\frac{3(x-5)}{3} = \frac{18}{3}$$
$$x - 5 = 6$$
$$+5 \quad +5$$
$$\boxed{x = 11}$$

2 $5(x + 6) = 40$

3 $$\frac{x+9}{2} = 5$$

4 $$\frac{x-15}{4} = 3$$

5 $32 = 8(x + 1)$

6 $$\frac{3+x}{7} = 4$$

7 $$\frac{x-10}{9} = 7$$

8 $6(x - 11) = 42$

9 $10(x + 2) = 70$

10 $$\frac{x+5}{4} = 14$$

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Solving "Tricky" 2-Step Equations

Instructions: Some 2-Step Equations are tricky because of the location of the unknown in operations that don't commute (subtraction and division). One way to solve these equations is to do an extra initial step to re-arrange the equation so that it looks like one you already know how to solve.

1 $(x + 5)\dfrac{12}{x + 5} = 2(x + 5)$

$$\dfrac{12}{2} = \dfrac{2(x + 5)}{2}$$

$$6 = x + 5$$
$$-5 \qquad -5$$
$$1 = x \quad \text{or} \quad \boxed{x = 1}$$

2 $\dfrac{21}{x - 4} = 7$

3 $11 = 23 - 4x$

4 $27 - 3x = 15$

5 $8 = \dfrac{24}{x - 3}$

6 $7 = \dfrac{77}{x + 6}$

7 $41 - 2x = 9$

8 $25 = 80 - 11x$

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Solving 2-Step Equations (with negative numbers)

Instructions: Solve each equation.

1 $-5 + 2x = -17$

2 $-9(x - 9) = 27$

3 $\dfrac{x + (-3)}{-5} = -6$

4 $\dfrac{x + 15}{-3} = -2$

5 $3(x - 8) = -60$

6 $\dfrac{x}{-2} + 10 = -3$

7 $\dfrac{x + 8}{-6} = 2$

8 $-3x - 3 = -15$

9 $\dfrac{x}{-9} - 1 = 9$

10 $\dfrac{x - 12}{-7} = 4$