

# Balancing Equations Activity Worksheet **ANSWER KEY**

For each equation, enjoy using the seesaw to:

1. Evaluate
2. Solve
3. Check your results

$$x = 5 - 2$$

**Evaluate:**

Unknown Variable = x, Coefficient = 1, Constants = +5, -2

**Solve:**

$$x = 5 - 2$$

$$x = 3$$

**Check:**

$$x = 5 - 2 \mid \text{where } x = 3$$

$$3 = 5 - 2$$

$$3 = 3$$

$$2y = -2 + 4$$

**Evaluate:**

Unknown Variable = y, Coefficient = 2, Constants = -2, +4

**Solve:**

$$2y = -2 + 4$$

$$2y = 2$$

$$\frac{2y}{2} = \frac{2}{2}$$

$$y = 1$$

**Check:**

$$2y = -2 + 4 \mid \text{where } y = 1$$

$$2(1) = -2 + 4$$

$$2 = -2 + 4$$

$$2 = 2$$

$$9a = 8 + 7a$$

**Evaluate:**

Unknown Variable = a, Coefficient = 9, 7, Constants = +8

**Solve:**

$$9a = 8 + 7a$$

$$-7a \quad -7a$$

$$2a = 8$$

$$\frac{2a}{2} = \frac{8}{2}$$

$$a = 4$$

**Check:**

$$9a = 8 + 7a \quad | \text{ where } a = 4$$

$$9(4) = 8 + 7(4)$$

$$36 = 8 + 28$$

$$36 = 36$$