Identity Property of ADDITION	
Identity Property of MULTIPLICATION	
Multiplicative Property of Zero	
Inverse Property of ADDITION	
Inverse Property of MULTIPLICATION	

• **Adding ZERO** to any number **leaves it unchanged**. The number maintains its identity. • In your words: + 0	**Numeric Ex:** 3 + 0 = 3 0 + 127 = 127 **Algebraic Ex:** a + 0 = a 0 + b = b
• **Multiplying ONE** by any number **leaves it unchanged**. The number maintains its identity. • In your words: × 1	**Numeric Ex:** 7 × 1 = 7 1 • 16 = 16 **Algebraic Ex:** a × 1 = a 1b = b
• The **product of ZERO** and any number is **ZERO**. • In your words: × 0	**Numeric Ex:** 12 • 0 = 0 0 × 97 = 0 **Algebraic Ex:** a • 0 = 0 0a = 0
• A number **added** to it's **inverse** (positive or negative) always **equals ZERO**. The **opposite** of a number. • In your words: = 0	**Numeric Ex:** 8 + -8 = 0 2 – 2 = 0 **Algebraic Ex:** a + -a = 0 b – b = 0
• A number **multiplied** by it's **inverse** (it's reciprocal) always **equals ONE**. The **opposite** of a number. • In your words: = 1	**Numeric Ex:** $3 \bullet \frac{1}{3} = 1$ $\frac{7}{9} \bullet \frac{9}{7} = 1$ **Algebraic Ex:** $a\left(\frac{1}{a}\right) = 1$ $\frac{b}{1} \bullet \frac{1}{b} = 1$