1. Additive Identity

What can you add to a number that doesn't change its identity?

Numerically: $3 + \_\_\_\_ = 3$

$\_\_\_\_ + 2.87 = 2.87$

Algebraically:

2. Multiplicative Identity

What can you multiply a number by that doesn't change its identity?

Numerically: $15 \cdot \_\_\_\_ = 15$

$\_\_\_\_ \cdot \frac{2}{3} = \frac{2}{3}$

Algebraically:

3. Multiplicative Property of Zero

What happens when you multiply a number by zero?

Numerically: $8 \cdot 0 = \_\_\_\_$

$0 \cdot 0.43 = \_\_\_\_$

Algebraically:

4. Multiplicative Inverse

- Invert a number ⟶ reciprocal

$\frac{2}{3} \rightarrow$ $5 \rightarrow$ $1\frac{1}{8} \rightarrow$

- What happens when you multiply reciprocals?

Numerically: $\frac{2}{9} \cdot \frac{9}{2} = \_\_\_\_$

$3 \cdot \_\_\_\_ = 1$

Algebraically:

5. Reflexive

Numerically: $19 = \_\_\_\_$

$4 + 8 \div 2 = \_\_\_\_\_$

Algebraically:

6. Symmetric

Line of symmetry:

Numerically: If $2 + 8 = 10$, then $10 = \_\_\_\_\_$

If $3 = x$, then $\_\_\_\_\_$

Algebraically:

7. Transitive

Travel

HOLA! HELLO! BONJOUR!

Numerically:

If $1 + 3 = 4$, and $4 = 2^2$, then _____

Algebraically:

8. Substitution

Numerically:

$\frac{12}{3} - 6 = \_\_\_ - 6$

Algebraically:

If $x = y$, then x may be _____ for y in any expression.

Evaluate the expression.
Name the property that justifies each step.

$\left(2 \cdot \frac{1}{2} + 8 \cdot 0\right) \cdot 12$

$= \left(1 + 8 \cdot 0\right) \cdot 12$ _____

$= \left(1 + 0\right) \cdot 12$ _____

$= 1 \cdot 12$ _____

$= 12$ _____

QUESTIONS I NEED TO ASK IN CLASS: