

Multiplying Integers - Properties

- Multiplying by zero

any number multiplied by 0 = zero

∴ multiplying any integer by zero also = zero

ie: $(-2) \times (0) = (0)$

$$(5) \times (0) = (0)$$

- Multiplying by one

any number multiplied by one is itself

∴ any integer multiplied by one is itself

ie: $(12) \times (1) = (12)$

$$(1) \times (-8) = (-8)$$

- Commutative Property

$$4 \times 2 = 8 \quad \text{and} \quad 2 \times 4 = 8$$

$$(-4) \times (2) = (-8) \quad \text{and} \quad (2) \times (-4) = (-8)$$

Any whole # multiplied by another whole # yield the same answer regardless of their order (which is first or second)



Any integer multiplied by another integer yields the same answer regardless of their order!!

- Distributive Property

$$\begin{aligned} 4 \times (2 + 3) &= (4 \times 2) + (4 \times 3) \\ 4 \times 5 &= 8 + 12 \\ 20 &= 20 \end{aligned}$$

you can write the product of integers without the use of the multiply sign

$$\begin{aligned} (-2) \times (-3) &= 6 \\ (-2)(-3) &= 6 \end{aligned}$$

Textbook work...pp. 73 - 75...#'s 3 - 13, 15 - 18

Work book...pp.32, 33

Quiz

