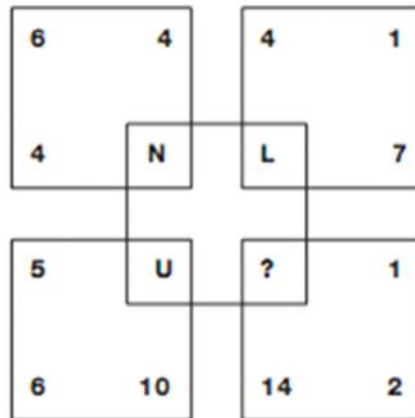


BELL WORK

Which letter replaces the question mark?



2.2 Notes Blank

Unit 2: Integers

2.2 Developing Rules to Multiply Integers

Name _____

Block _____

Which model did you like best from last lesson?



When 2 integers with the same sign are multiplied, their product is **always** positive.

$$(+2) \times (+3) = +6 \quad (-2) \times (-3) = +6$$

When 2 integers with different signs are multiplied, their product is **always** negative.

$$(+2) \times (-3) = -6 \quad (-2) \times (+3) = -6$$

Integers have these properties of whole numbers.

Multiplying by 0: $4 \times 0 = 0$
 $0 \times -4 = 0$

In other words, if we multiply an integer by 0, the answer is 0!

Multiplying by 1: $4 \times 1 = 4, 1 \times 4 = 4$
 $1 \times (-4) = -4$

In other words, if we multiply an integer by 1, the answer is what we multiplied by 1!

$$1 \times (-4) = -4$$
$$-1 \times 4 = -4$$

Commutative Property:

$$4 \times 2 = 8 \quad 2 \times 4 = 8$$
$$-4 \times 2 = -8 \quad 2 \times -4 = -8$$

Distributive Property:

$$3(x + 4)$$
$$3 \cdot x + 3 \cdot 4$$

integer by 1, the answer is what we multiplied by 1!

In other words, if we change the order that we multiply the numbers, the answer will be the same!

Multiply the outside number to each number in the bracket. Keep the addition sign in between!

You can write the product of integers without the use of the \times sign.

$(-4) \times (+2)$ can be written as: $(-4)(+2)$

HW: p 73 # 1, 3, 4, 5a, 7b dfg, 8acef, 9ab,
10, 15
 \Rightarrow 2 handouts when you finish !!