

September 19, 2011

Warm-Up: $-5 \cdot -12$

Multiply.

1. $7 \cdot 2$ 14

2. $9(-7)$ -63

3. $-6(8)$ -48

4. $-8(-10)$ 80

5. $6 \cdot (-5)$ -30

6. $-5 \cdot (-12)$ 60

9/19 - Multiplying Integers - Day 2

Review:

$$+ \cdot + = +$$

$$+ \cdot - = -$$

$$- \cdot + = -$$

$$- \cdot - = +$$

Discuss with your partner:

What if there are
3 integers rather than 2?

$$\underline{-3} \cdot 4 \cdot \underline{-2} = 24$$

Compute:

even # of negatives: positive
odd # of negatives: negative

$$12 \cdot (-1) \cdot (-2) \\ = 24$$

$$-4 \cdot 8 \cdot 3 \\ = -96$$

$$-10(-3)(-7) \\ = -210$$

What are "exponents"?

$$2^3$$

← exponent
← base

What does the exponent tell you?


How many times you multiply the base by itself.

$$\begin{aligned} 2^3 \\ = 2 \cdot 2 \cdot 2 \\ = 8 \end{aligned}$$

Compute each:

$$(-2)^3 = (-2)(-2)(-2) = -8$$

$$5^2 = 5 \cdot 5 = 25$$

$$(-5)^2 = (-5)(-5) = 25$$


Problems with both multiply and exponents

Exponents first!

$$\begin{aligned} & 9 \cdot \underline{(-5)^2} \\ &= 9 \cdot 25 \\ &= 225 \end{aligned}$$

$$\begin{aligned} & \underline{(-2)^3} \cdot (-6) \\ &= -8 \cdot (-6) \\ &= 48 \end{aligned}$$

Homework:

textbook: page 26
#1-39 all

due Tuesday