

## 11.4 (pg.498) Multiplying Integers

$$\ominus \times \ominus = \oplus \quad \text{Ex. } -4 \times -3 = +12$$

$$\oplus \times \oplus = \oplus \quad \text{Ex. } +4 \times +3 = +12$$

Same sign for factors, positive product.

$$\ominus \times \oplus = \ominus \quad \text{Ex. } -8 \times +3 = -24$$

$$\oplus \times \ominus = \ominus \quad \text{Ex. } +5 \times -6 = -30$$

Different signs for factors, negative product.

Same

Positive

Different

Negative

Some

People

Don't

No!

$$-6 \times +8 =$$

$$+5 \times +4 =$$

$$+9 \times -3 =$$

$$-5 \times -6 =$$

**Evaluate  $(-2)^2$ .**

$$\begin{aligned} (-2)^2 &= (-2) \cdot (-2) \\ &= 4 \end{aligned}$$

**Evaluate  $-5^2$ .**

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

**Evaluate  $(-4)^3$ .**

$$\begin{aligned} (-4)^3 &= (-4) \cdot (-4) \cdot (-4) \\ &= 16 \cdot (-4) \\ &= -64 \end{aligned}$$