

11.4 Multiplying Integers

ESSENTIAL QUESTION: Is the product of 2 integers positive, negative or zero?

The product of two integers with the same sign is positive.
Even number of negatives the product is positive.

The product of two integers with different signs is negative.
odd number of negatives the product is negative.

$$-5 \cdot (-6) = 30 \quad 9 \cdot (-7) = -63 \quad -6 \cdot 6 = -36 \quad -8 \cdot (-12) = 96$$

$$-5 \cdot (-5) = 25 \quad 4 \cdot (-11) = -44 \quad -7 \cdot 9 = -63$$

$$-8 \cdot (-7) = 56 \quad 12 \cdot (-6) = -72 \quad 4 \cdot (-6) = -24$$

$$-7 \cdot (-5) \cdot (-4) = 35 \cdot (-4) = -140$$

$$-10(-6)(0) = 60(0) = 0$$

$$2(-7)(-10) = -14(-10) = 140$$

$$-9(5)(-3) = -45(-3) = 135$$

USING EXPONENTS

Evaluate $(-2)^2 = 4$

Evaluate $-5^2 = -25$

Evaluate $(-4)^3 = -64$

Evaluate the expression.

$$(-3)^2 = 9$$

$$-6^3 = -216$$

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

$$-7^2 = -49$$

The bar graph shows the number of taxis a company has in service. The number of taxis decreases by the same amount each year for 4 years. Find the total change in the number of taxis.

