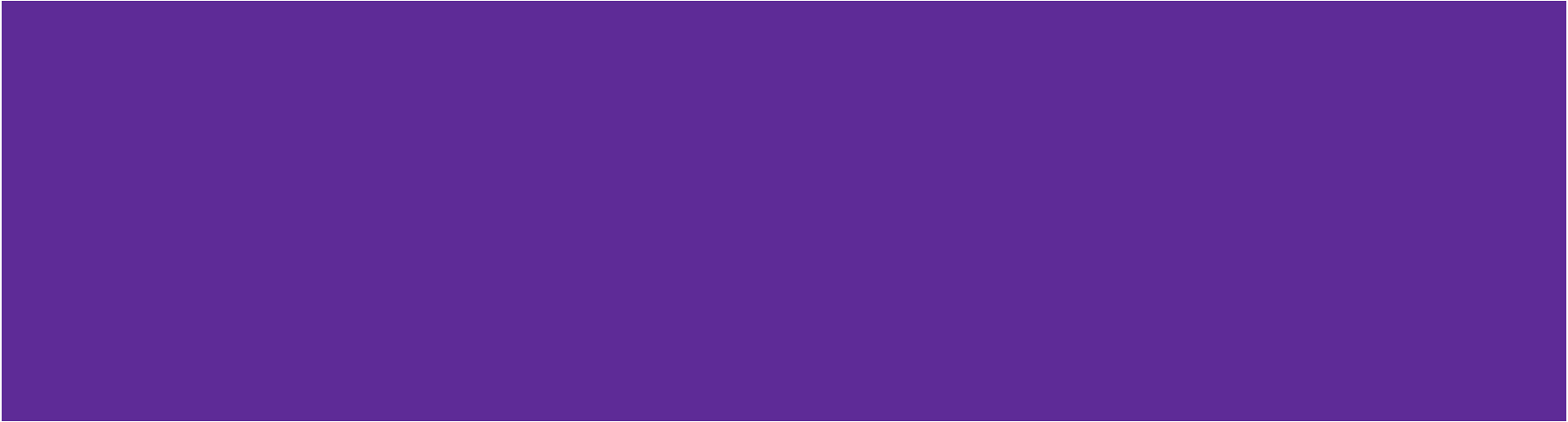


# Multiplying and Dividing Integers



# Multiplying Integers

When we multiply integers, there are 4 rules:

A positive (+) x a positive (+) = a positive (+)

A negative (-) x a negative (-) = a positive (+)

A negative (-) x a positive (+) = a negative (-)

A positive (+) x a negative (-) = a negative (-)

# Multiplying Integers

Example:

$$4 \times 2 = 8$$

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

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

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

# Dividing Integers

When dividing, we follow the **exact** same rules as multiplication!

A positive divided by a positive =

A negative divided by a negative =

A negative divided by a positive =

A positive divided by a negative =

# Dividing Integers

Example:

$$8 \div 4 =$$

$$-8 \div -4 =$$

$$8 \div -4 =$$

$$-8 \div 4 =$$

# Negative Bases & Exponents

The trickiest part, is when we have exponents:

$-3^2$  and  $(-3)^2$  actually have different answers!

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

and

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

# Negative Bases & Exponent

Example:

$$-4^0 \text{ and } (-4)^0$$

$$-4^0 =$$

$$(-4)^0 =$$

# Negative Bases & Exponent

Example:

$$-2^3 \text{ and } (-2)^3$$

$$-2^3 = -(2)^3 = -(2 \times 2 \times 2) = -(4 \times 2) = -8$$

$$(-2)^3 =$$