Chapter 2 Section 7

Multiplying Integers

Chapter 2 Section 8

Dividing Integers

Multiplying Integers

The product of two integers with different signs is NEGATIVE.

The product of two integers with the same sign is POSITIVE.

Positive x Positive = Positive

Negative x Negative = Positive

Negative x Positive = Negative

Positive x Negative = Negative

Multiplying Integers Examples

1.) $(-11) \cdot (-6) =$ 66

2.) $(-9) \cdot 18 =$ -162

3.) $(-17) \cdot (-4) =$ 68

4.) $10 \cdot (-17) \cdot 5 =$ $-170 \cdot 5 = -850$

5.) $5 \cdot (-2) =$ -10

6.) $(-6) \cdot 8 =$ -48

7.) $2 \cdot (-3) \cdot (-2) =$

$-6 \cdot -2 = 12$

Multiplying Integers Examples

We can also multiply integers with variables as well:

1.) $(-4) \cdot b =$ $-4b$

2.) $(-5) \cdot 3x =$ $-15x$

3.) $(-5y)(-6) =$ $30y$

4.) $(7y)(5z) =$ $35yz$

5.) $-3(-a)(-b) =$ $-3ab$

6.) $5x \cdot (-4)(-2) =$ $40x$

Dividing Integers

When dividing integers, use the same rules as when you multiply integers:

Positive ÷ Positive = Positive

Negative ÷ Negative = Positive

Negative ÷ Positive = Negative

Positive ÷ Negative = Negative

Dividing Integers Examples

1.) (-56) ÷ (-8) = 7

2.) 84 ÷ (-7) = -12

3.) -72 ÷ (-12) = 6

4.) (-51) ÷ (-17) = 3

5.) 98 ÷ (-14) = -7

6.) (-343) ÷ (-7) = 49

7.) (-96) ÷ 24 = -4

8.) 450 ÷ (-45) = -10