

# integers



## Negative integers

numbers less than zero,  
excluding fractions.

## Positive integers

numbers greater than zero,  
excluding fractions.

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

No fractions or decimal fractions.

## operations on positive and negative integers

### Addition

Positive + Positive = Positive

$$5 + 3 = 8$$

Negative + Negative = Negative

$$(-5) + (-3) = -8$$

\* Positive + Negative or Negative + Positive

$$(-5) + 3 = -2$$

• subtract the smaller number from the larger number,  
then use the sign of the larger number in the answer

$$3 + (-5) = -2$$

$$(-3) + 5 = 2$$

$$5 + (-3) = 2$$

### Subtraction

Negative - Positive = Negative

$$(-5) - 3 = (-5) + (-3) = -8$$

Positive - Negative = Positive

$$5 - (-3) = 5 + 3 = 8$$

\* Negative - Negative = Negative + Positive

$$(-5) - (-3) = (-5) + 3 = -2$$

• treat as Negative + Positive

$$(-3) - (-5) = (-3) + 5 = 2$$

• subtract the smaller number from the larger number,  
then use the sign of the larger number in the answer

### Multiplication

Positive x Positive = Positive

$$5 \times 3 = 15$$

Negative x Negative = Positive

$$(-3) \times (-5) = 15$$

Negative x Positive = Negative

$$(-3) \times 5 = -15$$

Positive x Negative = Negative

$$3 \times (-5) = -15$$

• change double negatives to a positive

### Division

Positive ÷ Positive = Positive

$$15 \div 3 = 5$$

Negative ÷ Negative = Positive

$$(-15) \div (-3) = 5$$

Negative ÷ Positive = Negative

$$(-15) \div 3 = -5$$

Positive ÷ Negative = Negative

$$15 \div (-3) = -5$$

• change double negatives to a positive