Per hundred

$$56\% = \frac{56}{100} = \frac{14}{25} = 0.56$$

$$0^2 = 0 \cdot 0 = \textbf{0}$$
$$1^2 = 1 \cdot 1 = \textbf{1}$$
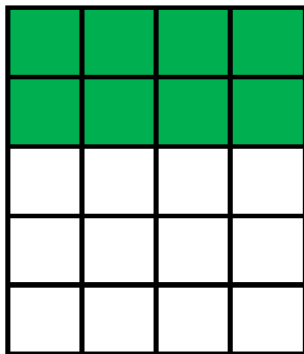$$2^2 = 2 \cdot 2 = \textbf{4}$$
$$3^2 = 3 \cdot 3 = \textbf{9}$$
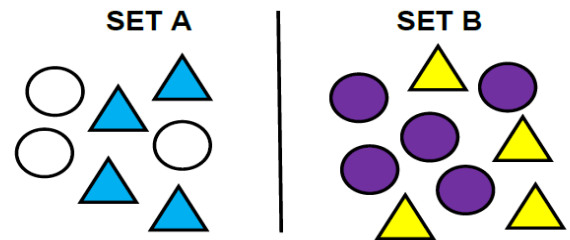$$4^2 = 4 \cdot 4 = \textbf{16}$$
$$5^2 = 5 \cdot 5 = \textbf{25}$$

$$\sqrt{16} = \sqrt{4 \cdot 4} = 4$$

Fraction: $\frac{2}{5}$

Decimal: 0.4

Percent: 40%

SET A	SET B

△ to ○	4 to 3
△ to all of set A	$\frac{4}{7}$
○ to ●	3:5
set B to set A	9 to 7 or 9:7

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exponent

$$2^3 = 2 \cdot 2 \cdot 2$$

base

$$n^4 = n \cdot n \cdot n \cdot n$$
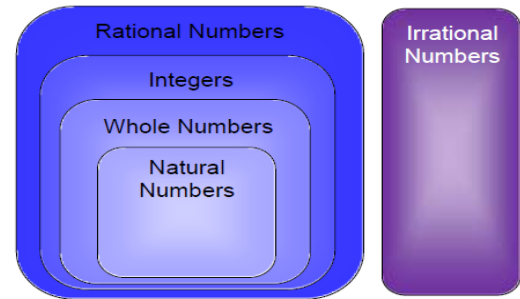
factors

$$|5| = 5 \qquad |-5| = 5$$

5 units   5 units

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
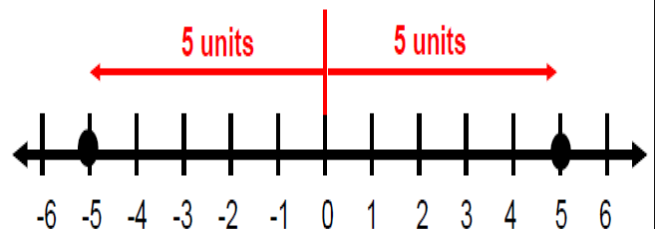
$$\frac{3}{4} \div \frac{1}{2}$$

How many halves are in three-fourths?

one "whole" half

half
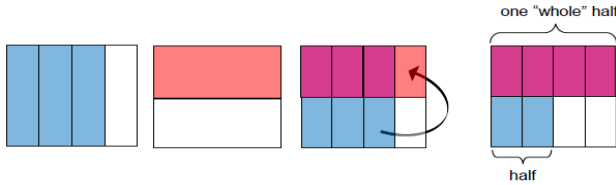
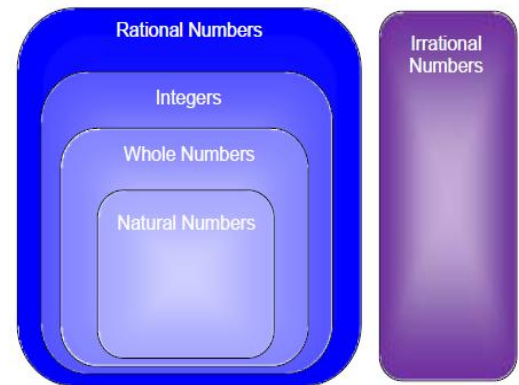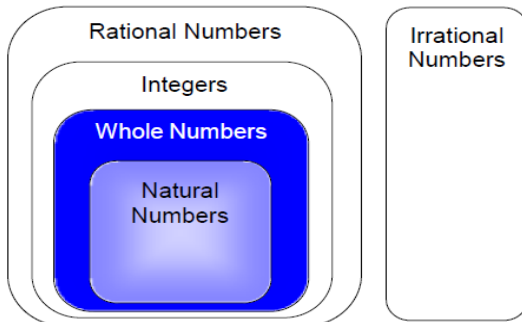There are $1\frac{1}{2}$ halves in three-fourths.

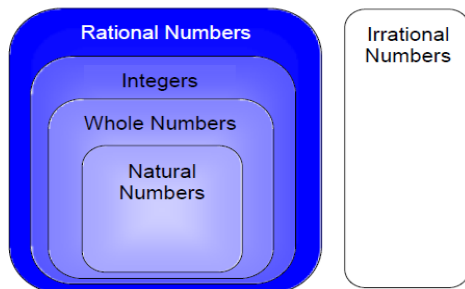$$\frac{3}{4} \div \frac{1}{2} = 1\frac{1}{2}$$

A number that cannot be expressed as the quotient of two integers

$$\sqrt{7} \quad \pi \quad -0.23223222322223\ldots$$

The set of numbers
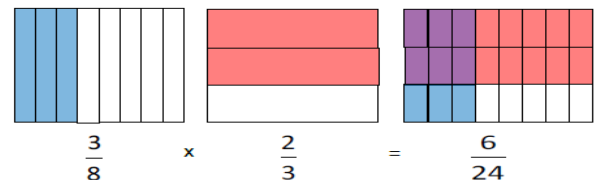# 0, 1, 2, 3, 4…

The set of all rational and irrational numbers

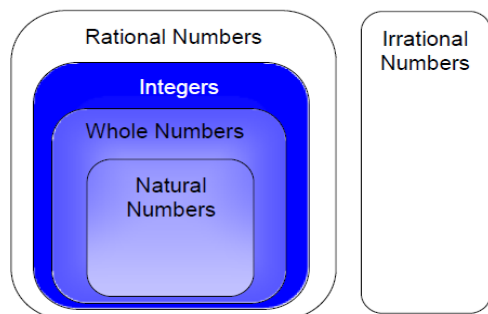**A number that can be written as the quotient of two integers**

$$2\frac{3}{5} \quad -5 \quad 0.3 \quad \sqrt{16} \quad \frac{13}{7}$$

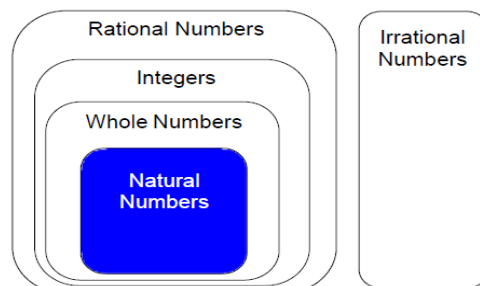**How much is $\frac{3}{8}$ of $\frac{2}{3}$?**

$$\frac{3}{8} \qquad x \qquad \frac{2}{3} \qquad = \qquad \frac{6}{24}$$

$$\frac{3}{8} \times \frac{2}{3} = \frac{6}{24} = \frac{1}{4}$$

The set of numbers …-3, -2, -1, 0, 1, 2, 3…

Rational Numbers

Irrational Numbers

Integers

Whole Numbers

Natural Numbers

The set of numbers 1, 2, 3, 4…

Rational Numbers

Irrational Numbers

Integers

Whole Numbers

Natural Numbers

	Meaning	Value
10^4	$10 \cdot 10 \cdot 10 \cdot 10$	10,000
10^3	$10 \cdot 10 \cdot 10$	1000
10^2	$10 \cdot 10$	100
10^1	10	10
10^0	1	1
10^{-1}	$\frac{1}{10}$	0.1
10^{-2}	$\frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{100} = 0.01$
10^{-3}	$\frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{1000} = 0.001$
10^{-4}	$\frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{10,000} = 0.0001$

(Number line: -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6)
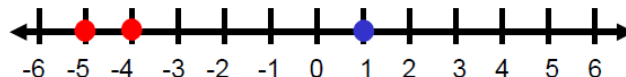
-5 < 1 or 1 > -5

-4 > -5 or -5 < -4

$$a \times 10^n$$

a = number greater than or equal to 1 and less than 10

n = integer

$$17,500,000 = 1.75 \times 10^7$$

$$0.0000026 = 2.6 \times 10^{-6}$$