

Section 5.5 - Ratios

Section 5.6 - Equivalent Ratios

Ratio is a way of comparing two or more quantities

Example: Every person has two hands 1:2

of Boys to # of Girls in this room?

The parts to a ratio are called terms

1 : 2
↓ ↓
term term

You read the ratio by saying 1 to 2.

Ratios can also be written as fractions

1/12 1:12

The order in which you write the terms is very important...

Ratio of boys to girls is 8:17

Ratio of girls to boys is 17:8

You can have a three term ratio...

ie: Boys to Girls to whole class

8:17:25

In the pet store there are 10 hamsters, 25 goldfish and 2 Puppies. What is the ratio of Puppies to hamsters to goldfish? What is the ratio of puppies to hamsters to gold fish to the total number of pets in the pet store.

$$2:10:25$$

$$2: 10:25: 37$$

Like fractions ratios can be reduced or

Written in simplest or lowest terms :

$$9:12 = 3:4$$

$$\downarrow \quad \downarrow$$

$$9/12 = 3/4$$

ie: $2: 10: 20$

$$1: 5: 10$$

ie: $5: 15: 45: 100$

$$1: 3: 9:20$$

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Like fractions you can find equivalent ratios

How?

- by multiplying each term by the same number
- by dividing each term by the same number

5: 6

10:12

20:24

40: 48

x by 2

x by 4

x by 8

500: 300

50: 30

250: 150

5:3

÷ by 10

÷ by 2

÷ by 100

What would you multiply or divide by to get these equivalent ratios???

10:16:20

5:4:10

100: 160: 200

Three Term Ratios

Iron man Triathalon competitors must...

swim 4km, cycle 180 Km and run 42km.

swim: cycle: run

4: 180: 42

= 2:90:21

= 1:45:10.5

In this triathalon, how many times farther do competitors cycle than they swim?

swim: cycle

4: 180

÷ by 4

= 1:45

45 times farther

How many times farther do the competitors run than they swim?

swim:run

4:42

÷ by 4

= 1:10.5

Work Book: 116 - 117

Work Sheets : E-7, E-9

Text Book: p. 266, 4-11