

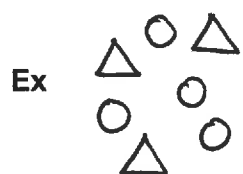
Chapter 7: Ratios, Rates, and Proportions**CH 7.1 - Ratios****Terminology**

Ratio - a comparison of two or more numbers.
 - describes how ~~much~~ many times one value contains another.

Ex. Mixing chainsaw fuel $\rightarrow$ 50 parts gasoline to 1 part oil.
 Gas : oil
 50 : 1

Types of Ratios

Two-term ratio - a comparison of two numbers.



Circles to triangles.

$$4:3 \rightarrow 4 \text{ to } 3 \rightarrow \frac{4}{3}$$

*Can be written in different ways

Three-term ratio - a comparison of three numbers



triangles to circles to squares

$$3:4:3$$

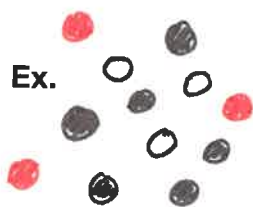
*The order matters!

Name:

Math 8

Date:

Part to part ratio - compares different parts of a group to each other

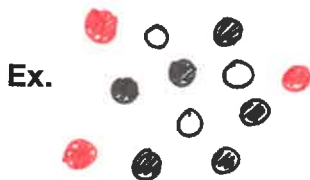


Red to black to white

$$3 : 6 : 3 \rightarrow 1 : 2 : 1$$

* always write in lowest terms just like fractions.

Part to whole ratio - compares one part of a group to the whole group.



Black to total.

$$6 : 12 \rightarrow 1 : 2 \text{ or } \frac{1}{2} \text{ "half of the circles are black"}$$

Show You Know

- What is the ratio of red tiles to total tiles?
- What tiles have a ratio of 2 : 3?
- What is the ratio of red to black to white tiles?



$$11:9:6 \quad 8:8 \quad 12:4$$

Show You Know

A company makes fruit smoothies using a ratio of 4 : 3 : 8 of fruit purée to yogurt to milk.



- What is the ratio of milk to fruit purée, in lowest terms?
- The company claims that their smoothies are more than 25% fruit. Are they correct?
- If the store makes a total of 4500 L of smoothies in a week, how much of each ingredient do they need?

Practice assignment - page 227 # 1-5, choose two apply questions