

Introduction to Ratios

Using the MathLinks text book, find and explain the following terms. Be sure that you actually understand what you have written and that you are not just copying from the text book. You may include diagrams if you think it will help.

Ratio: *a comparison of 2 or more quantities measured in the same units.*

eg) $0 : \square$ ← read as circles to squares
 $9 : 5$

Part-to-Part Ratio: *compares different parts of a group to each other.*

eg) $\Delta : X$ or $X \text{ and } O : \Delta \text{ and } \square$
 $4 : 6$ $\underline{=}$ $15 : 9$ or $\underline{=}$ $X : \square : \Delta$
 $6 : 5 : 4$

Part-to-Whole Ratio: *compares one part of a group to the whole group. Can be expressed as a fraction and a percent.*

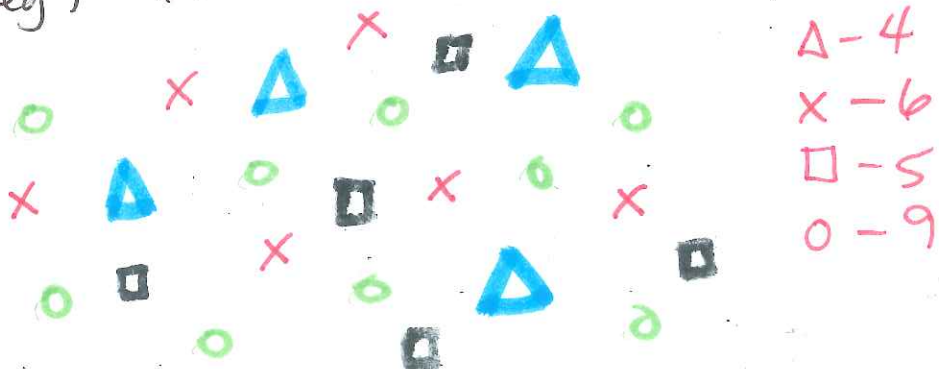
eg) $\square : \text{all shapes}$ or $\Delta \text{ and } X : \text{all shapes}$
 $5 : 24$ $\underline{=}$ $10 : 24$

2 Term Ratio: *compares TWO quantities measured in the same units.*

eg) $X : \square$ or $\Delta \text{ and } \square : O$
 $6 : 5$ $\underline{=}$ $9 : 9$

3 Term Ratio: *compares three quantities measured in the same units.*

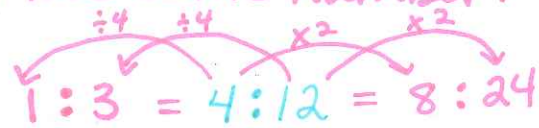
eg) $X : O : \square$
 $6 : 9 : 5$



Putting Ratios into Lowest Terms and Equivalent Ratios

To make an equivalent ratio, multiply or divide each term by the same number.

eg) $1:3 = 4:12 = 8:24$



To put a ratio into lowest terms, find the ~~biggest~~ ~~number~~ greatest common factor and divide each term in the ratio by it.

ex1) $3:6 = 1:2$



ex2) $15:25 = 3:5$

