Transcript of video Comparing Ratios

http://topdrawer.aamt.edu.au/Fractions/Big-ideas/Ratio/Working-with-ratio

The ratio 2 to 3 can be represented by a group of two stars and a group of three circles.

(Ratio of 2:3 represented by two stars and three circles)

Here is another ratio represented by six stars and nine circles.

(Ratio of 6:9 represented by six stars and nine circles)

Are these ratios equivalent? Are they in proportion with each other? One way to check is to see if groups of two stars and three circles can be made.

(Making the 6:9 collection into three groups)

Three complete groups can be made, each with two stars and three circles.

(Three groups with two stars and three circles)

The ratio of 6 to 9 is another way of expression the ratio 2 to 3. The ratios can also be written in a fraction format. There are three times as many stars, and three times as many circles. The ratios are in proportion.

(Ratios represented in fraction format)

What is the difference between fractions and ratios? Let's start by looking at what fractions are represented by this group of shapes.

(Fractions represented by three triangles and five squares)

It makes sense to think of part-whole fractions. There are total of eight shapes in the group. Each shape is one-eighth. Three-eighths of the shapes are triangles. Five-eighths of the shapes are squares.

(Triangles and squares marked with eighths)

With ratios, the triangles and squares are seen as distinct groups, with three in one group, and five in the other. The ratio represented is 3 to 5.

(3:5 ratio represented by triangles and squares marked with ones)

The fractions express the relationship between a subgroup of the whole and the whole itself. The ratio expresses a relationship between the two subgroups.

(Explaining relation between fractions and subgroups)