Unit 2 Glossary Terms

<u>ratio</u>

A ratio associates two or more quantities. Ratios can be described in words such as "3 to 2" and "3 for every 2" and "3 out of every 5" and "3 parts to 2 parts." We write ratios with symbols like this 3:2.

For example, we can say, "3 cups of flour for every 2 eggs" or "3 meters in 2 seconds."

Equivalent ratios

Two ratios *a*: *b* and *c*: *d* are equivalent ratios if there is a number *s* that you can multiply both *a* and *b* by to get *c* and *d* (respectively). In other words, $a \cdot s = c$ and $b \cdot s = d$.

8:6 is equivalent to 4:3 because you can multiply the numbers in the first ratio by $\frac{1}{2}$ to get the numbers in the second ratio.

Double number line diagram

A double number line diagram is a pair of parallel number lines with the numbers 0 aligned. Each number line is marked in equal increments and numbered. The tick marks are aligned, but the numbers on the two lines are often different. A pair of aligned numbers on the diagram represents a ratio that is equivalent to every other pair of aligned numbers on the diagram.



<u>per</u>

The word per means "for each." For example: he paid \$5 for each ticket, so the cost was \$5 per ticket.

<u>Unit price</u>

The unit price is the cost for one item or one unit of measure.

meters per second

A unit to measure speed that tells you how many meters an object travels in one second.

He was walking 2 meters per second, and went 20 meters in 10 seconds.

Same rate

In two situations involving ratios of the same two quantities, if the ratio of the quantities in one situation is equivalent to the ratio of the quantities in the other situation then we say the two situations involve the same rate.

<u>table</u>

A table is a way to organize information. Each rectangle in the table is called a

cell. Each horizontal set of entries is called a row, and each vertical set of entries is called a column. The first row in a table often contains *headers* to explain what information is in each column.

This table shows the tail-lengths of three different pets. It has four rows and two columns.

The first cell in each column tells you what kind of information is in that column.

pet	tail length (inches)
dog	22
cat	12
mouse	2

<u>Tape diagram</u>

A tape diagram can be used to represent a ratio between two quantities measured in the same units.



The tape diagram shows a ratio of 30 gallons of yellow paint to 50 gallons of blue paint.

A tape diagram is composed of one or more rectangles that are partitioned into equal parts. Each part represents a value. It can be any value, as long as the same value is used throughout.