

Comparing & Scaling 2.1

No new vocabulary terms.

Comparing & Scaling 2.2

rate

A comparison of quantities measured in two different units is called a rate. A rate can be thought of as a direct comparison of two sets (20 cookies for 5 children) or as an average amount (4 cookies per child). A rate such as 5.5 miles per hour can be written as $5.5 \text{ miles} / 1 \text{ hour}$, or 5.5 miles : 1 hour.

rate table

A table that shows the value of a single item in terms of another item. It is used to show equivalent ratios of the two items.

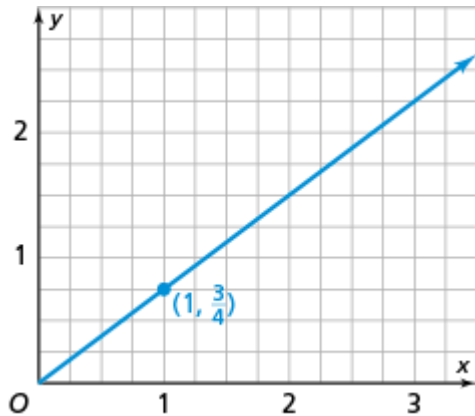
Movie Tickets

Number of people	1	2	3	4	5
Total Price	\$12	\$24	\$36	\$48	\$60

Comparing & Scaling 2.3

constant of proportionality

The constant ratio of two proportional quantities, x and y ; usually written as $y=kx$, where k is the constant of proportionality. For example, in the equation $y=34x$, the constant of proportionality is 34. The graph is shown below.



unit rate

A unit rate is a rate in which the second number (usually written as the denominator) is 1, or 1 of a quantity. For example, 1.9 children per family, 32 miles per gallon, and 3 flavors of ice cream1 banana split are unit rates. Unit rates are often found by scaling other rates.