

Cross Product
cross product
resents the numerator
the fraction
a common
minator is found
multiplying the
minators.

Example -
 $\frac{2}{5} = \frac{4}{10}$

$\frac{4}{5} = \frac{8}{10}$

$\frac{6}{8} = \frac{9}{12}$

$\frac{6}{8} \cdot \frac{9}{12} = 72$
 $\frac{6}{8} \cdot \frac{9}{12} = 72$

C $\frac{5}{2} = \frac{15}{6}$

$\frac{5}{2} \cdot \frac{15}{6} = 30$
 $\frac{5}{2} \cdot \frac{15}{6} = 30$

A $\frac{1}{6} + \frac{2}{3} = 1$
 $\frac{1}{6} + \frac{2}{3} = 1$

proportions

non-proportions

Summary-
we learned
cross products
and proportions
are equal. If the ratios
aren't in proportion, the
cross products aren't equal.

Rate-
a comparison
of two quantities.

Unit Rate-
are when ratios are
in which the
second quantity.

Unit Price-
is a unit rate used
to compare costs per
item.

Example-
A. $4:5 = \frac{4}{5} = \frac{1.3}{1}$
 $23:10 = \frac{23}{10} = 2.3$
 $13:9 = \frac{13}{9} = 1.4$

Summary-
we learned that a
rate is a comparison
of two quantities.
A unit rate are when
ratios the second
quantity. A unit price
is a unit rate
to compare prices

Ratio-
a ratio is
a comparison
of two quantities
by division.

Equivalent Ratios-
ratios that make the
same comparison.

Proportion-
ratios that are
equivalent are
said to be in
proportion.

Example-

A. 9 multiply or divide
at the ratio

$\frac{9}{27} = \frac{9 \div 9}{27 \div 9} = \frac{1}{3}$ Two equivalent ratios
to $\frac{9}{27}$ are $\frac{1}{3}$ and $\frac{2}{6}$

Summary-
we learned that
a ratio is a comparison
of two numbers by
division. We learned
an equivalent ratio is
a ratio made by the same
comparison. We also
learned that a proportion
is ratios that are
equivalent.