

# Properties of Proportions

If  $\frac{a}{b} = \frac{c}{d}$ , THEN

1.  $ad = bc$

Cross Multiply

2.  $\frac{b}{a} = \frac{d}{c}$

Upside down

3.  $\frac{a}{c} = \frac{b}{d}$

Sideways

4.  $\frac{a+b}{b} = \frac{c+d}{d}$

Sum N&D/D

5.  $\frac{a+c}{b+d} = \frac{a}{b} = \frac{c}{d}$

Sum N/Sum D