Grade 6 Math Cheat Sheet

Make equivalent ratios

Juice to water	**2 : 3**
Double both parts	**4 : 6**
Triple both parts	**6 : 9**

Keep the quantities in the same order.

Find a unit rate

Given rate	**15 miles in 3 hours**
For one hour	**15 ÷ 3 = 5 miles per hour**

Divide the miles by the hours to get miles per hour.

Fractions, decimals and percents

One quarter	**1/4 = 0.25 = 25%**
One half	**1/2 = 0.5 = 50%**
Three quarters	**3/4 = 0.75 = 75%**

To find a decimal, divide the numerator by the denominator. Percent means parts per hundred.

Percents

Percent as a decimal	**p% = p / 100**
Part of a whole	**part = rate × whole**

Use the decimal form for the rate.
Example: 15% of 80 is 0.15 × 80 = 12.

Compare rational numbers

Order	**−4 < −1/2 < 0 < 3**
Opposites	**−4 and 4**
Distance from zero	**|−4| = 4**

Numbers increase from left to right.

One-step equations

Undo addition	**x + 7 = 12; x = 5**
Undo multiplication	**4x = 20; x = 5**
Test an inequality	**5 > 3 is true**

Do the same operation to both sides of an equation.
Check an answer by substituting it for x.

Center and spread

Mean	**sum / count**
Median	**middle of the ordered data**
Range	**maximum − minimum**

For an even count, the median is the mean of the two middle values.
Example: 1, 4, 7, 8 has median 5.5.

Area of plane figures

Triangle	**A = ½bh**
Rectangle or parallelogram	**A = bh**
Trapezoid	**$A = \frac{1}{2}(b_1 + b_2)h$**

Measure h perpendicular to the base.
The trapezoid bases are parallel.
Use square units.

