Grade 5 Math Cheat Sheet

Equivalent fractions

Multiply both parts	**2/3 = 4/6**
Divide both parts	**8/12 = 2/3**
Tenths to hundredths	**7/10 = 70/100**

Use the same nonzero factor for numerator and denominator.
To compare, use a shared denominator or benchmark.

Fraction operations

Unlike denominators	**½ + ¼ = ¾**
Multiply	**(2/3) × (3/5) = 2/5**
Divide a unit fraction	**¼ ÷ 3 = 1/12**
Divide by a unit fraction	**3 ÷ ¼ = 12**

For addition and subtraction, rename fractions to a common denominator first.

Add mixed numbers

Whole numbers	**1 + 2 = 3**
Fraction parts	**1/3 + 1/4 = 4/12 + 3/12 = 7/12**
Mixed-number sum	**3 + 7/12**

To add 1 and 1/3 to 2 and 1/4, add the whole and fraction parts separately.

Read and compare decimals

Expanded form	**3.047 = 3 + 0.04 + 0.007**
Compare	**0.460 > 0.406**

Line up decimal points. Compare digits from left to right.

Decimal operations

Equivalent decimals	**3.4 = 3.40 = 3.400**
Add	**4.6 + 0.35 = 4.95**
Multiply	**1.2 × 0.3 = 0.36**

Line up decimal points for addition and subtraction.
Estimate first to check the decimal point in a product.

Rectangular prism volume

Length by width by height	**V = Lwh**
Base area by height	**V = Bh**
Example: 5 by 3 by 2	**V = 30 units^3**

B is the area of one base. Volume counts cubic units.

Plot in the first quadrant

Ordered pair	**(x, y)**
Plot (3, 2)	**3 right, 2 up**

Start at the origin (0, 0). The x-coordinate comes first.

Evaluate expressions

Group first	**4 × (6 − 2) = 16**
Without grouping	**4 × 6 − 2 = 22**

Multiply and divide left to right, then add and subtract left to right.