



Rhode Island Comprehensive Assessment System Grade 8 Mathematics Reference Sheet

CONVERSIONS

1 cup = 8 fluid ounces	1 inch = 2.54 centimeters	1 pound = 16 ounces
1 pint = 2 cups	1 meter \approx 39.37 inches	1 pound \approx 0.454 kilogram
1 quart = 2 pints	1 mile = 5280 feet	1 kilogram \approx 2.2 pounds
1 gallon = 4 quarts	1 mile = 1760 yards	1 ton = 2000 pounds
1 gallon \approx 3.785 liters	1 mile \approx 1.609 kilometers	
1 liter \approx 0.264 gallon	1 kilometer \approx 0.62 mile	
1 liter = 1000 cubic centimeters		

AREA (A) FORMULAS

$$\text{square} \dots \dots \dots A = s^2$$

$$\text{rectangle} \dots \dots \dots A = bh$$

OR

$$A = l w$$

$$\text{parallelogram} \dots \dots \dots A = bh$$

$$\text{triangle} \dots \dots \dots A = \frac{1}{2}bh$$

$$\text{trapezoid} \dots \dots \dots A = \frac{1}{2}h(b_1 + b_2)$$

$$\text{circle} \dots \dots \dots A = \pi r^2$$

CIRCLE FORMULAS

$$\text{area} \dots \dots \dots A = \pi r^2$$

$$\text{circumference} \dots \dots \dots C = 2\pi r$$

OR

$$C = \pi d$$

VOLUME (V) FORMULAS

$$\text{cube} \dots \dots \dots V = s^3$$

(s = length of an edge)

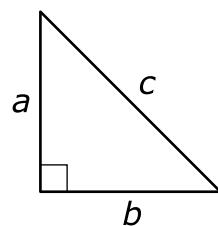
$$\text{sphere} \dots \dots \dots V = \frac{4}{3}\pi r^3$$

$$\text{cone} \dots \dots \dots V = \frac{1}{3}\pi r^2 h$$

$$\text{right circular cylinder} \dots \dots \dots V = \pi r^2 h$$

$$\text{right prism} \dots \dots \dots V = Bh$$

PYTHAGOREAN THEOREM



$$a^2 + b^2 = c^2$$