



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 ≈ 39.37 inches | 1 pound ≈ 0.454 kilogram |
| 1 quart = 2 pints | 1 mile = 5280 feet | 1 kilogram ≈ 2.2 pounds |
| 1 gallon = 4 quarts | 1 mile = 1760 yards | 1 ton = 2000 pounds |
| 1 gallon ≈ 3.785 liters | 1 mile ≈ 1.609 kilometers | |
| 1 liter ≈ 0.264 gallon | 1 kilometer ≈ 0.62 mile | |
| 1 liter = 1000 cubic centimeters | | |

AREA (A) FORMULAS

- square $A = s^2$
- rectangle $A = bh$
OR
 $A = lw$
- parallelogram $A = bh$
- triangle $A = \frac{1}{2}bh$
- trapezoid $A = \frac{1}{2}h(b_1 + b_2)$
- circle $A = \pi r^2$

CIRCLE FORMULAS

- area. $A = \pi r^2$
- circumference. $C = 2\pi r$
OR
 $C = \pi d$

VOLUME (V) FORMULAS

- cube $V = s^3$
(s = length of an edge)
- sphere $V = \frac{4}{3}\pi r^3$
- cone $V = \frac{1}{3}\pi r^2h$
- right circular cylinder $V = \pi r^2h$
- right prism $V = Bh$

PYTHAGOREAN THEOREM

