

2002 Massachusetts Comprehensive Assessment System Grade 8 Mathematics Reference Sheet

Use the information and ruler below as needed to answer questions in this test.

PERIMETER FORMULAS

- square..... $P = 4s$
- rectangle $P = 2b + 2h$
- triangle..... $P = a + b + c$

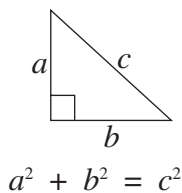
CIRCLE FORMULAS

- circle $C = 2\pi r$
- OR
- $C = \pi d$
- $A = \pi r^2$

CONVERSIONS

- 1 mile = 5280 feet
- 1 square mile = 640 acres

Pythagorean Theorem



AREA FORMULAS

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

VOLUME FORMULAS

- rectangular prism $V = Bh$
(B = area of base)
- cone..... $V = \frac{1}{3}\pi r^2 h$
- cylinder $V = \pi r^2 h$
- cube..... $V = s^3$
(s = length of an edge)

