

Ohio Grade 8 Mathematics Achievement Test Reference Sheet

Information that may be needed to solve problems on the Mathematics Test:

Area Formulas

parallelogram $A = bh$

rectangle $A = lw$

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

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

Circle Formulas

$$C = 2\pi r$$

$$A = \pi r^2$$

$$\pi \approx 3.14 \text{ or } \frac{22}{7}$$

Volume Formulas

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

cylinder $V = \pi r^2 h$

pyramid $V = \frac{1}{3} Bh$
($B =$ area of base)

rectangular prism $V = lwh$

right prism $V = Bh$
($B =$ area of base)

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

Distance Formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$