

Grade 8 Reference Sheet

Area:

circle: $A = \pi r^2$

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

Circumference:

circle: $C = 2\pi r$

Perimeter:

polygon: $P =$ sum of lengths of all sides

Pythagorean Theorem: $a^2 + b^2 = c^2$

Surface area:

cylinder: $SA =$ sum of areas of bases and lateral surface area

prism: $SA =$ sum of areas of all faces (bases included)

pyramid: $SA =$ sum of areas of all faces (base included)

Volume:

cone: $V = \frac{1}{3} \times$ area of base \times cone height

cylinder: $V =$ area of base \times cylinder height

prism: $V =$ area of base \times prism height

pyramid: $V = \frac{1}{3} \times$ area of base \times pyramid height

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

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

Note: Figures in this test are drawn as accurately as possible, except when it is specifically stated that the figure is not drawn to scale.