

GRADE 8 COMMON EXAM FORMULA SHEET

You may need to refer to the formula sheet to help you solve some questions on the exam.

**Key: A = Area; b = base; B = area of base; C = circumference; d = diameter;
h = height; r = radius; P = perimeter; V = volume; and $\pi = 3.14$**

PERIMETER (P) FORMULAS

Square..... $P = 4 \times \text{side}$

Rectangle.. $P = 2 \times \text{length} + 2 \times \text{width}$

Triangle.... $P = \text{side } a + \text{side } b + \text{side } c$

Circle..... $C = \pi d$
or $C = \pi \times d$

AREA (A) FORMULAS

Square..... $A = \text{side}^2$
or $A = \text{side} \times \text{side}$

Rectangle... $A = \text{base} \times \text{height}$
or $A = \text{length} \times \text{width}$

Triangle..... $A = \frac{1}{2} \text{ base} \times \text{height}$
or
 $A = \frac{\text{base} \times \text{height}}{2}$

Circle..... $A = \pi r^2$
or
 $A = \pi \times r \times r$

VOLUME (V)

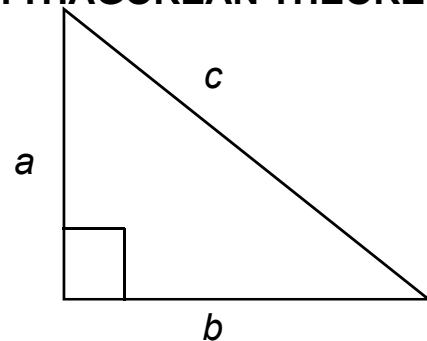
Volume = area of base (B) x height (h)

Cube and rectangular prism
 $V = B \times h$

Triangular prism
 $V = B \times h$

Cylinder
 $V = \pi r^2 h$
or
 $V = \pi \times r \times r \times h$

PYTHAGOREAN THEOREM



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

$$a^2 = c^2 - b^2$$

$$b^2 = c^2 - a^2$$

REMEMBER: Answer all questions with the appropriate unit measure.