GRADE 9-10 MATHEMATICS
DSTP REFERENCE SHEET

AREAS OF POLYGONS

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

Rectangle $A = bh$

Square $A = s^2$

Parallelogram $A = bh$

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

VOLUMES

Cube $V = s^3$

Pyramid $V = \frac{1}{3}Bh$
where B = area of the base

Cylinder $V = \pi r^2 h$

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

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

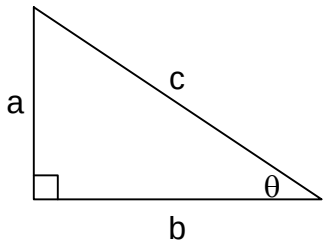
Prism $V = Bh$
where B=area of the base

CIRCLES

$C = 2\pi r = \pi d$

$A = \pi r^2$

RIGHT TRIANGLES



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

$\sin\theta = \frac{a}{c}$

$\cos\theta = \frac{b}{c}$

$\tan\theta = \frac{a}{b}$

SURFACE AREAS

Cube $SA = 6s^2$

Cylinder $SA = 2\pi rh + 2\pi r^2$

Sphere $SA = 4\pi r^2$

DISTANCE BETWEEN POINTS (x_1, y_1) & (x_2, y_2)

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