2007 Grade 11 Formula Sheet

$P = 2l + 2w$

$A = lw$

$SA = 2lw + 2lh + 2wh$

$V = lwh$

Pythagorean Theorem :

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

Permutations : $P(n, r) = \dfrac{n!}{(n - r)!}$

$A = bh$

$SA = 4\pi r^2$

$V = \dfrac{4}{3}\pi r^3$

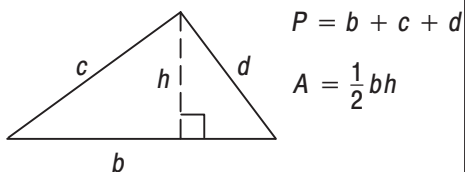**Combinations :** $C(n, r) = \dfrac{n!}{r!(n - r)!}$

Distance Formula :

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

$A = \dfrac{1}{2}h(a + b)$

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

$V = \pi r^2 h$

Midpoint : $\left(\dfrac{x_1 + x_2}{2}, \dfrac{y_1 + y_2}{2} \right)$

Slope : $m = \dfrac{y_2 - y_1}{x_2 - x_1}$

$P = b + c + d$

$A = \dfrac{1}{2}bh$

$SA = \pi r^2 + \pi r \sqrt{r^2 + h^2}$

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

Point-Slope Formula :

$(y - y_1) = m(x - x_1)$

Slope-Intercept Formula :

$y = mx + b$

Standard Equation of a Line :

$Ax + By = C$

$C = 2\pi r$

$A = \pi r^2$
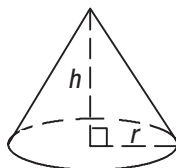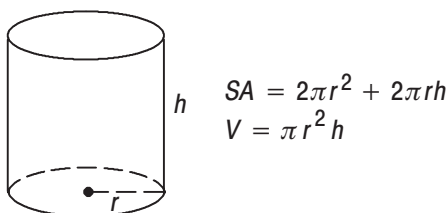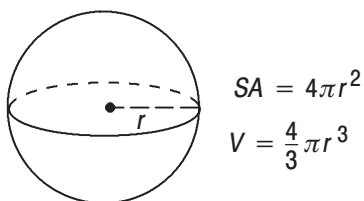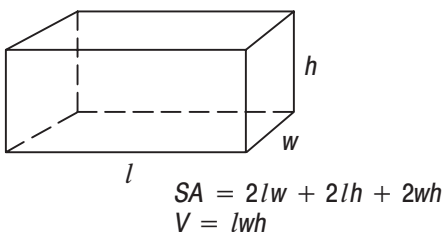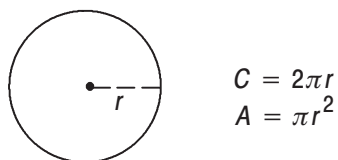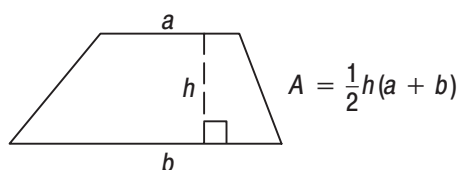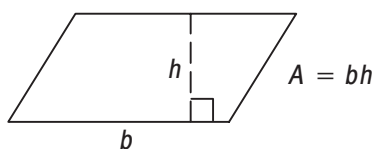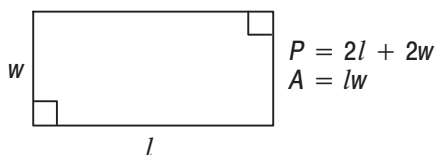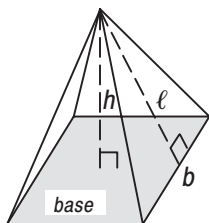
$SA = \text{(Area of the base)} +$
$\dfrac{1}{2}\ell \text{ (number of base sides)}(b)$

$V = \dfrac{1}{3} \text{ (Area of the base)} \times h$