

Grade 11 Formula Sheet

You may use the following formulas to solve problems on this test.

Pythagorean Theorem	$a^2 + b^2 = c^2$
Distance formula	$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
Quadratic formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Trigonometric Relations	$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}} \quad \cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$ $\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$
$A = \pi r^2$ $C = \pi d$	$A = \text{area}$ $C = \text{circumference}$ $d = \text{diameter}$ $r = \text{radius}$
$SA = ph + 2B$ $SA = \pi r l + \pi r^2$ $SA = 4\pi r^2$	$SA = \text{surface area}$ $B = \text{area of base}$ $h = \text{height}$ $p = \text{perimeter}$ $r = \text{radius}$ $l = \text{slant height}$
$V = Bh$ $V = \frac{1}{3} Bh$ $V = \frac{4}{3} \pi r^3$	$V = \text{volume}$ $B = \text{area of base}$ $h = \text{height}$ $r = \text{radius}$