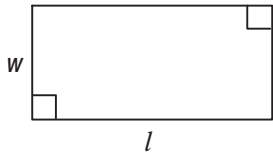


Grade 11 Formula Sheet

Formulas that you may need to work questions on this test are found below.

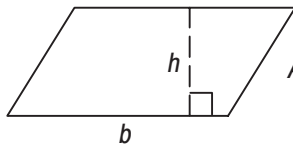
You may refer to this page at any time during the mathematics test.

You may use calculator π or the number 3.14.

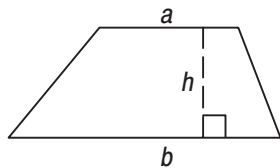


$$P = 2l + 2w$$

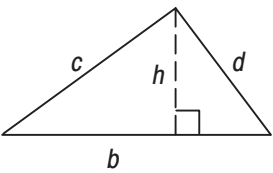
$$A = lw$$



$$A = bh$$

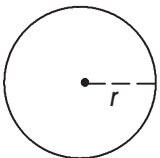


$$A = \frac{1}{2}h(a + b)$$



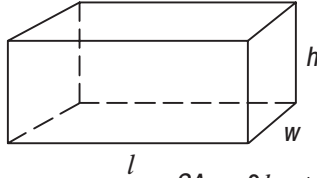
$$P = b + c + d$$

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



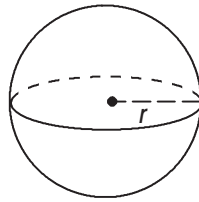
$$C = 2\pi r$$

$$A = \pi r^2$$



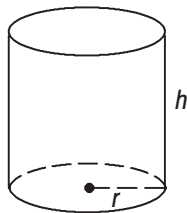
$$SA = 2lw + 2lh + 2wh$$

$$V = lwh$$



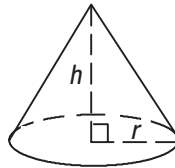
$$SA = 4\pi r^2$$

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



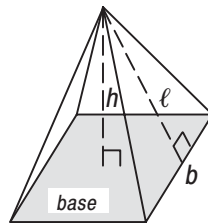
$$SA = 2\pi r^2 + 2\pi rh$$

$$V = \pi r^2 h$$



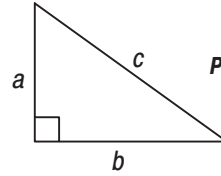
$$SA = \pi r^2 + \pi r\sqrt{r^2 + h^2}$$

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



$$SA = (\text{Area of the base}) + \frac{1}{2} \ell (\text{number of base sides})(b)$$

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



Pythagorean Theorem :

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

Permutations :

$$P(n, r) = \frac{n!}{(n - r)!}$$

Combinations :

$$C(n, r) = \frac{n!}{r!(n - r)!}$$

Distance Formula :

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

Midpoint :

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Slope :

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Point-Slope Formula :

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

Slope-Intercept Formula :

$$y = mx + b$$

Standard Equation of a Line :

$$Ax + By = C$$