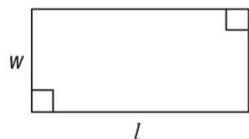


Grade 11 Formula Sheet

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

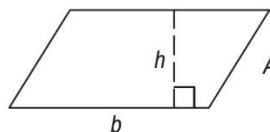
You may refer to this page at any time during the mathematics test.

You may use calculator π or the number 3.14.

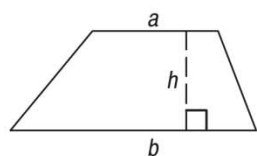


$$P = 2l + 2w$$

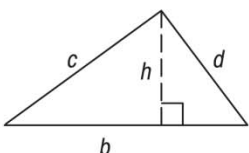
$$A = lw$$



$$A = bh$$

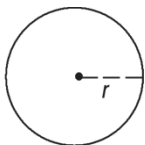


$$A = \frac{1}{2}h(a + b)$$



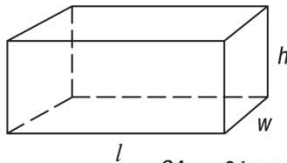
$$P = b + c + d$$

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



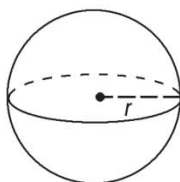
$$C = 2\pi r$$

$$A = \pi r^2$$



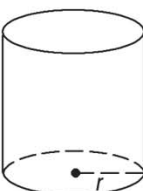
$$SA = 2lw + 2lh + 2wh$$

$$V = lwh$$



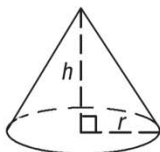
$$SA = 4\pi r^2$$

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



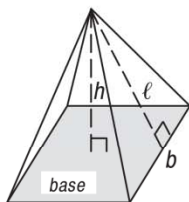
$$SA = 2\pi r^2 + 2\pi rh$$

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



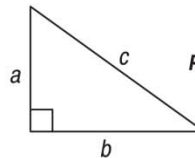
$$SA = \pi r^2 + \pi r \sqrt{r^2 + h^2}$$

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



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

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



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 :

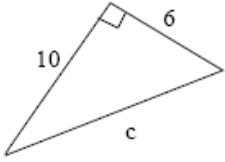
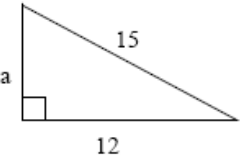
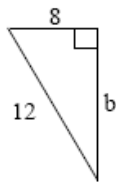
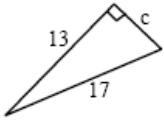
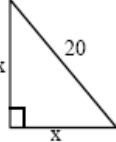
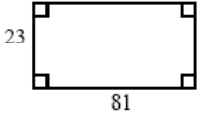
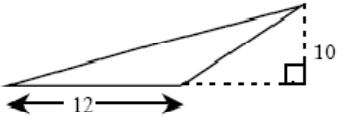
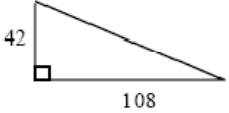
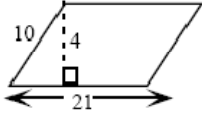
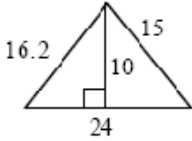
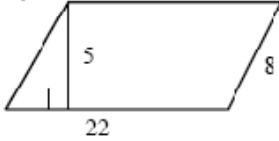
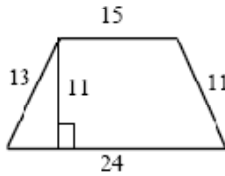
$$y = mx + b$$

Standard Equation of a Line :

$$Ax + By = C$$

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DO NOWS for Week of December 12, 2011

<p>Monday MATH SOLVER & Formula Sheet</p>	<p>For each figure, use the Pythagorean Theorem to write an equation, then solve for the missing length. Draw area pictures on each side of the triangle if you need help solving the equations.</p> <p>a) </p> <p>b) </p> <p>c) </p>
<p>Tuesday MATH SOLVER & Formula Sheet</p>	<p>To solve each of the parts below we use the Pythagorean Theorem. Write equations, draw a diagram, or use area pictures on each side of the triangle if you need them.</p> <p>a) Solve for the missing side. </p> <p>b) Find x to the nearest tenth: </p> <p>c) A ten foot ladder is four feet from a wall. How high on the wall does the ladder touch?</p> <p>d) Could 3, 6 and 8 represent the lengths of the sides of a right triangle? Explain.</p>
<p>Wednesday Formula Sheet</p>	<p>Calculate the exact area.</p> <p>a) </p> <p>b) </p> <p>c) </p> <p>d) </p>
<p>Thursday Formula Sheet</p>	<p>Find the area of each figure below. All units are in centimeters.</p> <p>a) </p> <p>b) </p> <p>c) </p>
<p>Friday Formula Sheet</p>	<p>Find the area of the shaded region. Sketch the picture on your paper and show the figure dissection and calculations for the subproblems you used in your solution.</p> 