

2016 Mathematics Standards of Learning

1A.4c

1. $A = \frac{1}{2}h(b_1 + b_2)$ is a formula which can be used to find the area (A) of a trapezoid in which h represents height, and b_1 and b_2 represent the bases of the trapezoid. Using algebraic properties, solve the formula for height (h).

2. The formula for the finding the perimeter of a rectangle can be represented as

$2l + 2w = P$. Where l represents the length and w represents the width. Using algebraic properties, solve the formula for width (w).

3. The formula for finding the surface area of a square-based pyramid can be represented as

$$S.A. = \frac{1}{2}lp + B.$$

Select all formulas that are equivalent to this formula.

$B = S.A. - \frac{1}{2}lp$	$p = \frac{2(S.A.)}{lB}$	$l = 2\left(\frac{S.A. - B}{p}\right)$
$B = \frac{2(S.A.)}{lp}$	$\frac{2(S.A. - B)}{l} = p$	$2\left(\frac{S.A.}{pB}\right) = l$

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4. Solve the formula $(y - y_1) = m(x - x_1)$ for x .

5. The formula for finding the volume of a cone can be represented as $V = \frac{1}{3}\pi r^2 h$,

where V represents the volume, r represents the radius, and h represents the height. Solve the formula for the height, h .