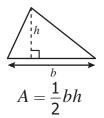
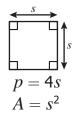
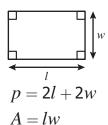
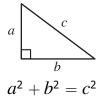
Algebra I Formula Sheet 2009 Mathematics Standards of Learning

Geometric Formulas:









Quadratic Formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
, where $ax^2 + bx + c = 0$ and $a \neq 0$

Statistics Formulas:

Given:

x represents an element of the data set, x_i represents the i^{th} element of the data set, n represents the number of elements in the data set, μ represents the mean of the data set, and σ represents the standard deviation of the data set.

variance
$$(\sigma^2) = \frac{\sum\limits_{i=1}^n (x_i - \mu)^2}{n}$$

variance
$$(\sigma^2) = \frac{\sum\limits_{i=1}^n (x_i - \mu)^2}{n}$$
 standard deviation $(\sigma) = \sqrt{\frac{\sum\limits_{i=1}^n (x_i - \mu)^2}{n}}$

mean absolute deviation
$$=\frac{\sum\limits_{i=1}^{n}\left|x_{i}-\mu\right|}{n}$$
 z-score $(z)=\frac{x-\mu}{\sigma}$

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