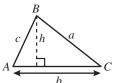
Geometry Formula Sheet 2009 Mathematics Standards of Learning

Geometric Formulas

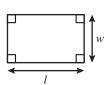


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}ab \sin C$$



$$p = 4s$$
$$A = s^2$$



$$p = 2l + 2w$$

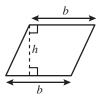
$$A = lw$$



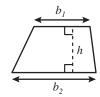
$$C = 2\pi r$$

$$C = \pi d$$

$$A = \pi r^2$$



$$A = bh$$



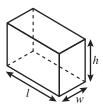
$$A=\frac{1}{2}h(b_1+b_2)$$



$$V = Bh$$

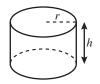
$$L.A. = hp$$

 $S.A. = hp + 2B$



$$V = lwh$$

$$S.A. = 2lw + 2lh + 2wh$$



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

 $L.A. = 2\pi rh$

$$S.A. = 2\pi r^2 + 2\pi rh$$



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

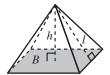
$$S.A. = 4\pi r^2$$



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

$$L.A. = \pi r l$$

$$S.A. = \pi r^2 + \pi r l$$



$$V = \frac{1}{3}Bh$$

$$L.A. = \frac{1}{2}lp$$

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

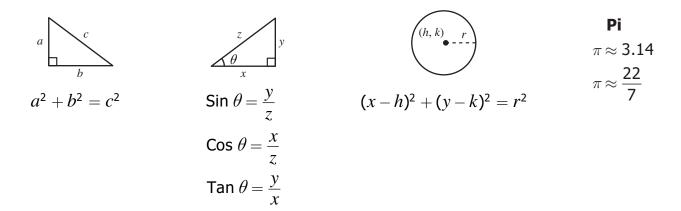
Abbreviations

Area	A
Area of Base	В
Circumference	C
Lateral Area	L.A.
Perimeter	p
Surface Area	S.A.
Volume	V

Copyright ©2011 by the Commonwealth of Virginia, Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner. Commonwealth of Virginia public school educators may reproduce any portion of this mathematics formula sheet for non-commercial educational purposes without requesting permission. All others should direct their written requests to the Virginia Department of Education, Division of Student Assessment and School Improvement, at the above address or by e-mail to Student_Assessment@doe.virginia.gov.

Geometry 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 $a \neq 0$

Geometric Symbols

Example	Meaning
m∠A	measure of angle ${\cal A}$
AB	length of line segment AB
\overrightarrow{AB}	ray AB
	right angle
$\overrightarrow{AB} \parallel \overrightarrow{CD}$	Line AB is parallel to line CD .
$\overline{AB} \perp \overline{CD}$	Line segment AB is perpendicular to line segment CD .
$\angle A \cong \angle B$	Angle A is congruent to angle B .
$\triangle ABC \sim \triangle DEF$	Triangle ABC is similar to triangle DEF .
	Similarly marked segments are congruent.
	Similarly marked angles are congruent.

Copyright ©2011 by the Commonwealth of Virginia, Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner. Commonwealth of Virginia public school educators may reproduce any portion of this mathematics formula sheet for non-commercial educational purposes without requesting permission. All others should direct their written requests to the Virginia Department of Education, Division of Student Assessment and School Improvement, at the above address or by e-mail to Student_Assessment@doe.virginia.gov.