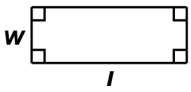
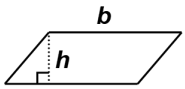
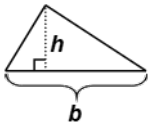
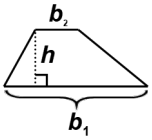
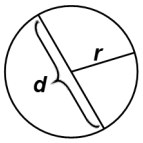
Maryland
STATE DEPARTMENT OF EDUCATION

MSTAR Mathematics – Grade 7 Reference Sheet

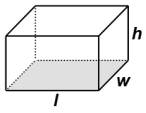
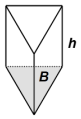
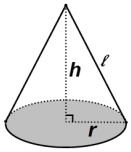
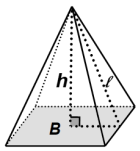
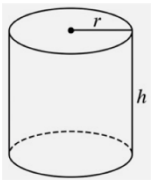
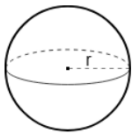
Division of Assessment and Accountability

Formulas

AREA (A) AND CIRCUMFERENCE (C)

Name	Shape	Formula
Rectangle		$A = lw$
Parallelogram		$A = bh$
Triangle		$A = \frac{1}{2}bh$
Trapezoid		$A = \frac{1}{2}(b_1 + b_2)h$
Circle		$A = \pi r^2$ $C = 2\pi r$ or $C = \pi d$

VOLUME (V) AND SURFACE AREA (SA)

Name	Shape	Formula
Right Rectangular Prism		$V = lwh$ $SA = 2lw + 2hl + 2hw$
General Prism		$V = Bh$ SA = Sum of the areas of the faces
Cone		$V = \frac{1}{3}\pi r^2 h$
Pyramid		$V = \frac{1}{3}Bh$ $SA = B + \frac{1}{2}P\ell$
Cylinder		$V = \pi r^2 h$
Sphere		$V = \frac{4}{3}\pi r^3$