M8 - 5.0/7.0 - Shapes SA/V Table Review

Triangles

180° — **Scalene**

a … a / x … x — **Isosceles**

60° / 60° … 60° — **Equilateral**

$a^2 + b^2 = c^2$; a, c, b, 90° — **Right Angle**

Similar AAA

$\dfrac{6}{4} = \dfrac{3}{2}$

6, θ, 90°, 4 ; 3, θ, 2
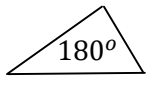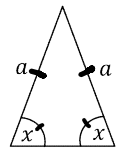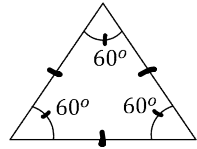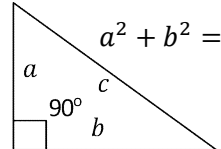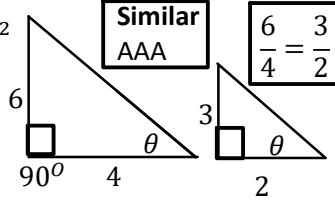
Area & Perimeter
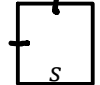
Square
$A = s^2$
$P = 4s$
s
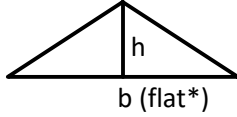
Rectangle
$A = l \times w$
$P = 2l + 2w$
w, l

Triangle
$A = \dfrac{bh}{2}$
$p = a + b + c$
h, b (flat*)

Circle
$A = \pi r^2$
$C = 2\pi r$
r

Shape	Surface Area	Volume
Cube — s	Draw it Flat! $SA = s^2 \times 6$	$V = Area_{base} \times height$ $V = s^3$
Rectangular Prism — h, l, w	$SA = 2(lw + lh + wh)$	$V = lwh$
Cylinder — r, h	$SA = 2\pi r^2 + 2\pi rh$	$V = \pi r^2 h$
Triangular Prism — s, h, b, H	$SA = bh + 2sH + bH$	$V = \dfrac{bh}{2} \times H$
Cone — s, h, r	$SA = \pi r^2 + \pi rs$	$V = \dfrac{1}{3} Area_{base} \times height$ $V = \dfrac{1}{3} \times (\pi r^2) \times h$
Square-Based Pyramid — s, h, b	$SA = 2bs + b^2$	$V = \dfrac{1}{3} \times b \times b \times h$
General Right Pyramid	$SA = sum\ side\ faces$	$V = \dfrac{1}{3} \times l \times w \times h$
Sphere — r	$SA = 4\pi r^2$	$V = \dfrac{4}{3} \pi r^3$