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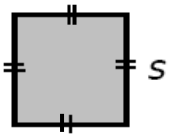
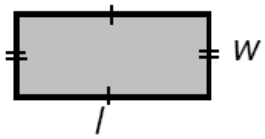
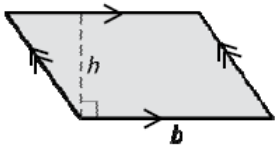
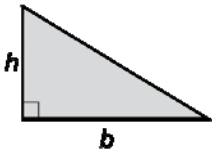
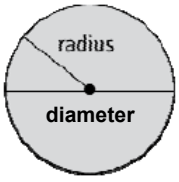
Formulas

Perimeter and Area:

Shape	Perimeter	Area
Square 	$P = s + s + s + s$ *or* $P = 4s$	$A = s^2$ *or* $A = s \times s$
Rectangle 	$P = (2l) + (2w)$ *or* $P =$ sum of all sides	$A = lw$
Parallelogram 	$P = s_1 + s_2 + s_3 + s_4$ *or* $P =$ sum of all sides	$A = bh$
Triangle 	$P = s_1 + s_2 + s_3$ *or* $P =$ sum of all sides	$A = bh \div 2$ *or* $A = \frac{bh}{2}$

Shape	Radius	Diameter	Circumference	Area
Circle 	$r = d \div 2$	$d = 2r$	$C = 2\pi r$ *or* $C = \pi d$	$A = \pi r^2$

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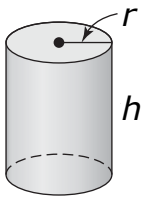
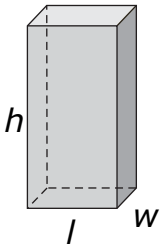
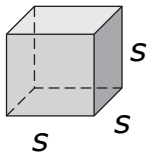
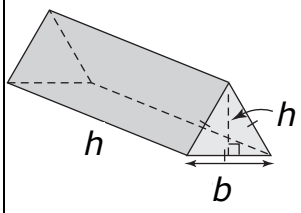
(continued)

Surface Area: SA = 2 × (area of base) + (perimeter of base) × (height)
or
SA = sum of the area of all the faces

Prism	Surface Area	Volume
Cylinder 	$SA = 2\pi r^2 + \pi dh$ *or* $SA = 2\pi r^2 + 2\pi rh$	V = area of base × height *or* $V = \pi r^2 h$
Right Rectangular Prism 	SA = area of top and bottom + area of front and back + area of ends *or* $SA = 2lw + 2lh + 2hw$	V = area of base × height *or* $V = lwh$
Cube 	SA = 6(area of side) *or* $SA = 6s^2$	V = area of base × height *or* $V = s^3$ or $V = s \times s \times s$
Right Triangular Prism 	SA = sum of area of 3 rectangles + 2 × area of triangle	V = area of triangular base × height *or* $V = (bh \div 2) \times$ height of prism

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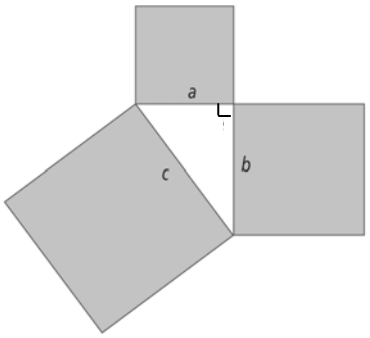
Scale:

$$\text{Scale} = \frac{\text{diagram measurement}}{\text{actual measurement}}$$

Distance: $\text{Speed} = \frac{\text{distance}}{\text{time}}$

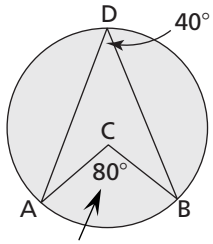
Pythagorean relationship: $c^2 = a^2 + b^2$



Properties of Circles:

central angle = 2 × inscribed angle

inscribed angle = central angle ÷ 2



central angle

inscribed angle

sum of angles in a triangle = 180°

Probability:

$$\text{Probability} = \frac{\text{\# of favourable outcomes}}{\text{total \# of outcomes}}$$

$$\text{Mean} = \frac{\text{sum of items}}{\text{number of items}}$$

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