

Survival Guide

1. Single step conversion

Joe is travelling in the United States. A road sign indicates he is 228 mi from his destination. How many kilometres is Joe from his destination?

2. Multi step conversion – because of power

2300 cm^2 ft^2

3. Multi step conversion – because of missing conversion link

1250mL c

4. Comparison of prices

The gas station on Maine Street charges \$24 for 32 L of gas, while the gas station on Kane Street charges \$25 for 10 gal of gas. Which store gives the most amount of gas for each dollar spent?

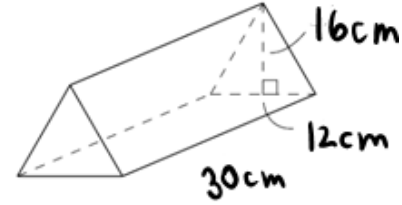
5. Converting Temperature

The temperature in Green Bay is 50°F convert to degrees Celsius.


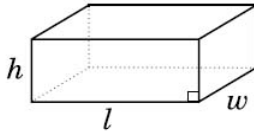
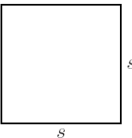
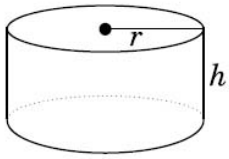
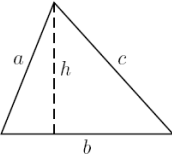
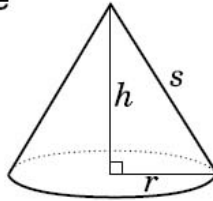
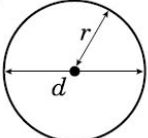
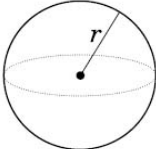
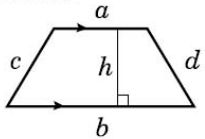
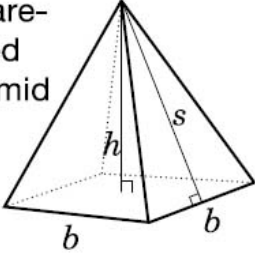
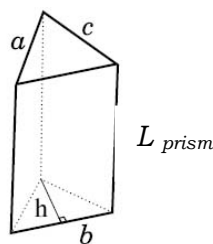
Unit 7 – Measurement

Name: _____

6. Find surface area and volume



Formulas for all shapes

<p>Rectangle</p> 	$P = 2(l + w)$ $A = lw$	<p>Rectangular prism</p> 	$SA = 2lw + 2lh + 2wh$ $V = l \times w \times h$
<p>Square</p> 	$P = 4s$ $A = s^2$	<p>Cylinder</p> 	$SA = 2\pi r^2 + 2\pi rh$ $V = \pi r^2 h$
<p>Triangle</p> 	$P = a + b + c$ $A = \frac{bh}{2}$	<p>Cone</p> 	$SA = \pi r^2 + \pi rs$ $V = \frac{\pi r^2 h}{3}$
<p>Circle</p> 	$C = 2\pi r$ $A = \pi r^2$	<p>Sphere</p> 	$SA = 4\pi r^2$ $V = \frac{4\pi r^3}{3}$
<p>Trapezoid</p> 	$P = a + b + c + d$ $A = \frac{h}{2}(a + b)$	<p>Square-based pyramid</p> 	<p><i>SA = add Areas of all shapes when unfolded</i></p> $V = \frac{l \times w \times h}{3}$
		<p>Triangular prism</p> 	<p><i>SA = add Areas of all shapes when unfolded</i></p> $V = \frac{b_{tri} \times h_{tri}}{2} \times L_{prism}$ $V = \left(\frac{bh}{2}\right)(L)$

Conversion Chart

	LENGTH	VOLUME	MASS
Conversion for Imperial only	12 in = 1 ft 3 ft = 1 yd 1760 yd = 1 mi	16 tbsp = 1 c 16 fl oz = 1 pt 2 pt = 1 qt 8 pt = 1 gal	16oz = 1lb 2000 lb = 1ton
Conversion Between both	30.48 cm = 1 ft 2.54 cm = 1 in 1.6 km = 1 mi	15 mL = 1 tbsp 29.57 mL = 1 fl oz 0.473 L = 1 pt 3.785 L = 1 gal 1L = 4 c	28.35 g = 1 oz 454 g = 1 lb 0.454 kg = 1 lb 0.9 t = 1 ton (US)
Conversion for Metric only	10 mm = 1 cm 100 cm = 1 m 1000 m = 1 km	1000 mL = 1 L	1000 g = 1 kg 1000 kg = 1 t

Temperature
 $^{\circ}\text{C} = \frac{5}{9}(\text{F} - 32)$
 $^{\circ}\text{F} = 1.8\text{C} + 32$