Unit 1 Review

1. Convert the following:
   a. 9 gal. = _____ qt.
   b. ½ qt. = _____L
   c. 2004 mL = _____L
   d. 6.5 kL =_____L
   e. 592 mL = ___fl oz
   f. 700 g = _____kg
   g. 1.25 oz = _____g
   h. 75 lb = _____kg
   i. 25 g = _____mg
   j. 14 yd =_____ft
   k. 5 mi = _____yd
   l. 6 ft 3 in = _____in
   m. 261 cm= _____in
   n. 125 m = _____yd
   o. 125 m = _____ft
   p. 6 km = _____mi

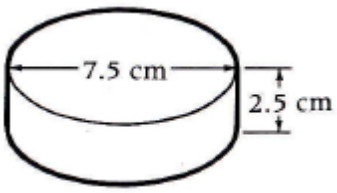
2. Express each temperature in degrees Fahrenheit, to the nearest tenth of a degree.
   a. -2°C
   b. 0°C
   c. 21°C

3. Express each temperature in degrees Celsius, to the nearest tenth of a degree.
   a. 16°F
   b. 22°F
   c. 14°F

4. A swimming pool is 8 m long, 6 m wide and 1.5 m deep. The water resistant paint needed for the pool cost $6 per square meter. How much will it cost to paint the interior surfaces of the pool?

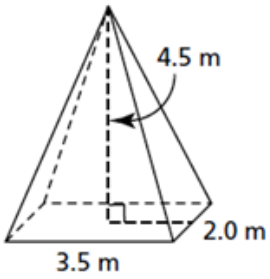
5. The length of Vancouver Island from North to south is approximately 460 km. Sarah has an average stride length of 27 inches. How many strides would Sarah take to walk from the northernmost tip to the southernmost tip?

6. A sporting goods manufacturer produces hockey pucks with the dimensions shown. How many cubic meters of material are required to make 2 500 000 pucks?

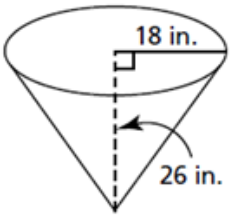


7. Determine the volume of each object. Round your answer to the nearest whole number.

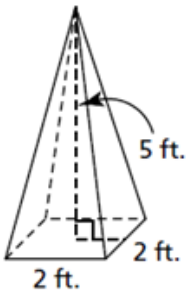
a) right rectangular pyramid



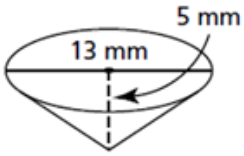
b) right cone



c) right square pyramid



d) right cone



8. A water tank on Terry's property is shaped like a cylinder. The tank is 13 feet tall and has a diameter of 8 feet. Terry wants to paint the lateral surface area of the tank. How many square feet of paint will be need?

9. Sarah needs to fill her cylindrical bottle with juice. The radius of the bottle is 5cm and the height is 25 cm. If the juice costs \$ 0.01/cm^3, how much will it cost her to fill up her bottle?

10. Jared wants to put a fence up around his yard. The length of the rectangular lot is 25 ft and the width is 33 ft. How many feet of fencing will he need?

11. A classroom 16 ft by 20 ft needs new flooring. If the flooring costs \$5/ft^2, how much will it cost for the new floor?

12. A Ferris wheel has a radius of 65feet, what is the circumference of the Ferris wheel?

13. Shelley wants to put a lace trim around her circular table cloth. What length of material will she need if the diameter of the table cloth is 18 inches?

Answers: 1a)36qt b)0.568L or 0.473L c)2.004L d)6500L e)20 fl oz f)0.7kg g)35.5g h)34.1kg h)25000mg i)42 ft k)8800yd l)75in m)102.7in n)138.67yd o)410.125ft p)3.7mi 2a)28.4°F b) 32°F c) 69.8°F 3a)-8.9°C b) -5.6°C c)-10°C 4) \$540 5)670750 strides 6)275.9765m^3 7a) 11m^3 b)8817 in^3 c)7ft^3 d)221mm^3 8)327 ft^2 9)\$19.62 10)116ft 11)\$1600 12) 408.2ft 13) 56.52in