

## Measurement Practice

### Perimeter and Area of Composite Shapes

1) *Review of unit conversions:* Imagine you were going to convert the following units. Fill in the correct numbers in each proportion that you would use to solve, then state the final answer after solving.  
(Round all decimals to 1 decimal place only!)

a) Convert 52.9 inches to yards. (*1 yard = 36 inches*)

$$\frac{1 \text{ yard}}{\text{yards}} = \frac{36 \text{ inches}}{\text{inches}}$$

After solving this on paper, I have determined that 52.9 yards is equal to:

\_\_\_\_\_ inches

b) Convert 12.9 L to quarts. (*1 Litre = 1.06 quarts*)

$$\frac{1 \text{ litres}}{\text{litres}} = \frac{1.06 \text{ quarts}}{\text{quarts}}$$

After solving this on paper, I have determined that 12.9 L is equal to:

\_\_\_\_\_ quarts

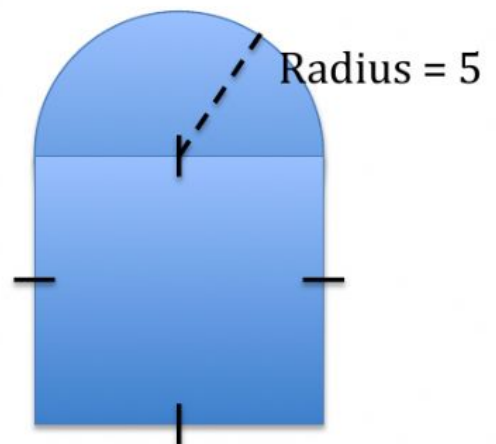
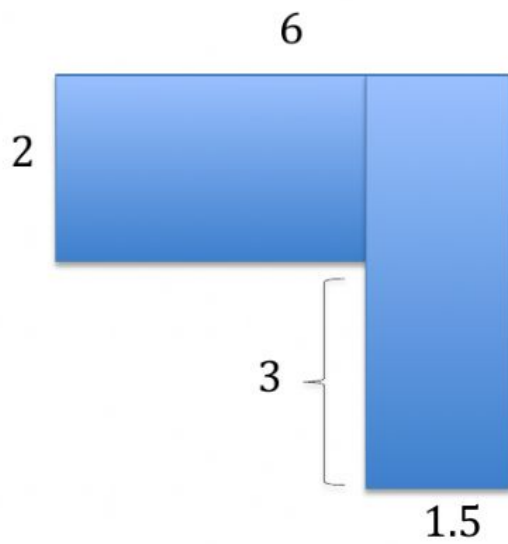
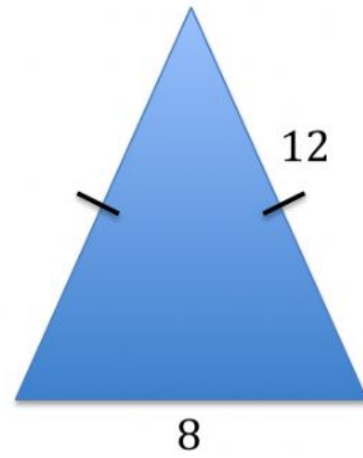
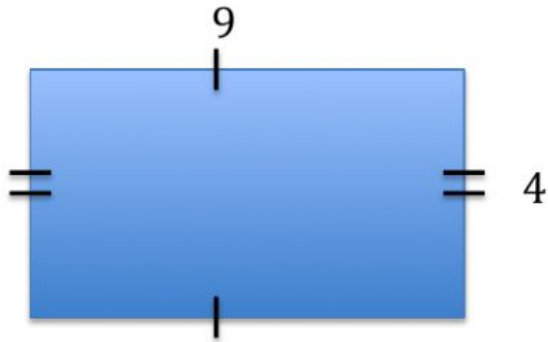
c) Convert 39.6 cm to inches (*1 inch = 2.54cm*)

$$\frac{1 \text{ in}}{\text{in}} = \frac{2.54 \text{ cm}}{\text{cm}}$$

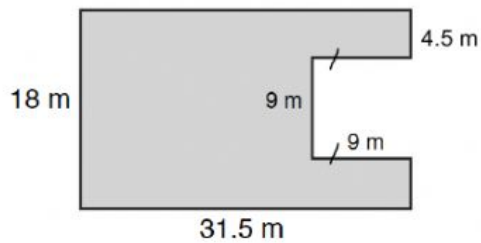
After solving this on paper, I have determined that 39.6 cm is equal to:

\_\_\_\_\_ inches

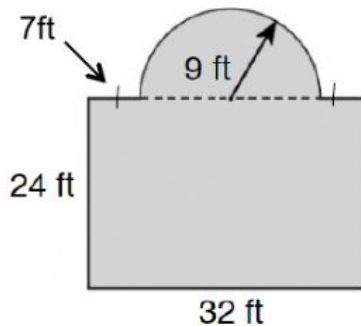
2) Label the missing sides of each of the following shapes.



3. Find the **perimeter** of the composite shapes. Choose your answer from the options at the bottom of the page and then drag it in to the correct position.



Final perimeter = \_\_\_\_\_ m



Final perimeter = \_\_\_\_\_ ft

108	117	72	99
81	112.5	65	89
98	136.5	108.3	112.5
84.3	80	108.5	122.3

#### Helpful Formulas

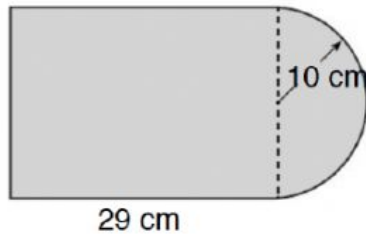
Perimeter = add all sides together

Diameter =  $2(\text{radius})$

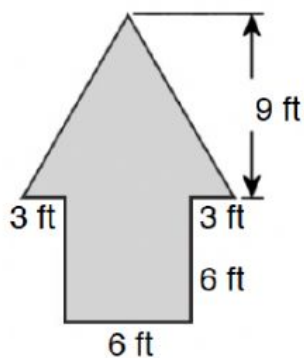
Circumference =  $2\pi r$

$\pi = 3.14$

4. Find the **area** of the composite shapes. Choose your answer from the options at the bottom of the page and then drag it in to the correct position.



Final area = \_\_\_\_\_ cm<sup>2</sup>



Final area = \_\_\_\_\_ ft<sup>2</sup>

290	580	894	90
157	138	657.5	9110.6
36	63	737.1	144
27	39	76.5	108

#### Helpful Formulas

$$A_{\text{rectangle}} = Lw$$

$$A_{\text{circle}} = \pi r^2$$

$$A_{\text{triangle}} = \frac{\text{Base} \times \text{Height}}{2}$$

$$\pi = 3.14$$