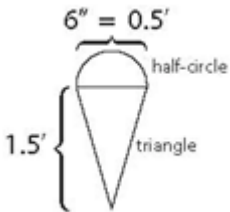
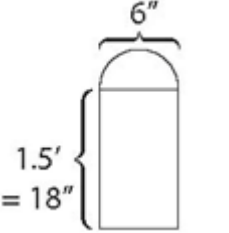
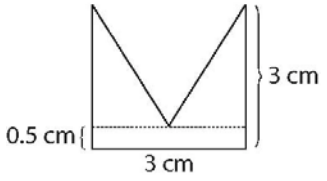
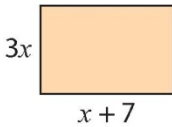
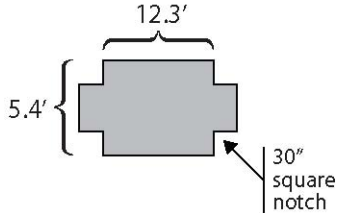
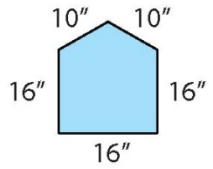


First name: _____ Last name: _____ Student ID: _____

Geometry 1 Homework

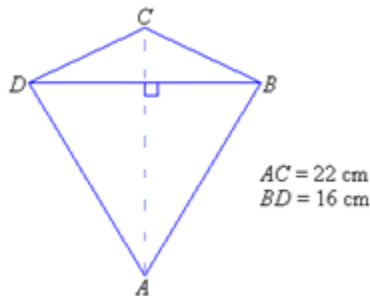
Complete

<p>Find the area:</p> 	<p>Find the perimeter:</p> 	<p>Find the area :</p> 
<p>Find the area:</p> 	<p>Find the area:</p> 	<p>Find the area:</p> 

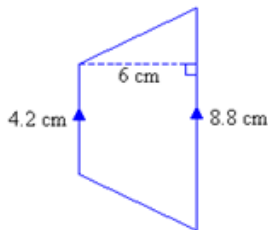
Word problems:

1. A bicycle wheel has a radius of 21 cm.
 - a. Find the circumference of the wheel using $\pi = 3.14$; and calculate the distance covered by the bicycle in 1500 revolutions in kilometres. Round your answer to 3 decimal places.
 - b. In covering a distance of 3 km, how many revolutions does the wheel make to the nearest integer?

2. Find the area of the following kite.



3. Find the area of the following trapezium.



4. Find the area of a circle of whose diameter is 11 cm using $\pi = 3.14$. Round your answer to 2 decimal places.

5. Zara built a new house that has a large backyard. She decided to make a rectangular flower bed that is 15 m long and 12 m wide. She also wants to build a 1.50 m wide pebble path around the flower bed.

1). Draw a diagram of the flower bed with a path around it.

2). Find the area of the flower bed.

3). Fertilizer is needed for the proper growth of the flower bed. If 1 bag of fertilizer covers 9 m^2 , how many bags of fertilizer will Zara need to buy?

4). Find the area of the pebble path around the flower bed.

5). Pebble mix can be bought in bags costing \$7.75 and can cover approximately 0.8 m^2 at the required depth for a path. How much will Zara pay for the pebble mix?

6. Solve the following problems in algebraic terms. Simplify your answers.

a) Six scouts arrange their campsite so that each tent is equidistant from the next tent **and** from the fire. How much bigger would the area of the campsite be if they reposition the tents so that they are *twice* as far from the fire? Use the graphic below as needed.

b) How much bigger would the area of the campsite be if, instead of twice the distance, they reposition their tents so that each one is *three times the original distance* from the fire and the adjacent tents? Use the graphic below as needed.

Hint: The height (r) of the triangle formed by two adjacent tents and the fire doubles when the distance from a tent to the fire doubles.

