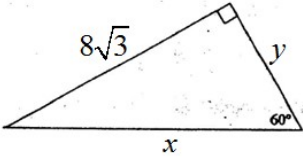
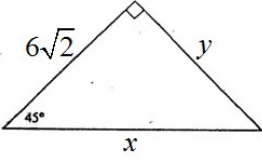
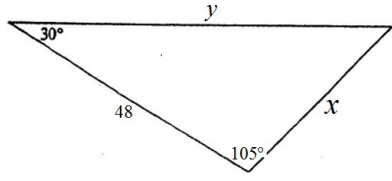
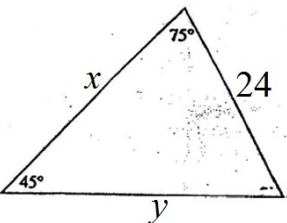
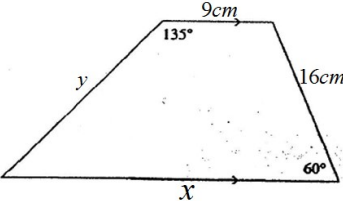
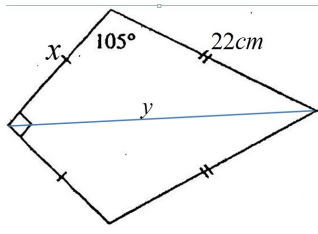
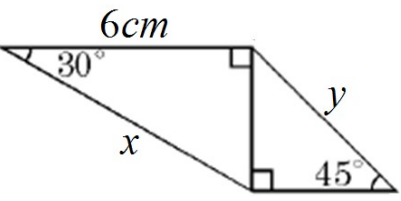
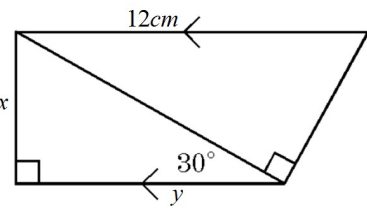
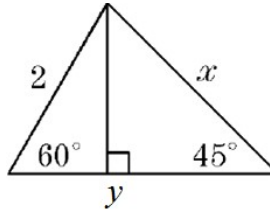


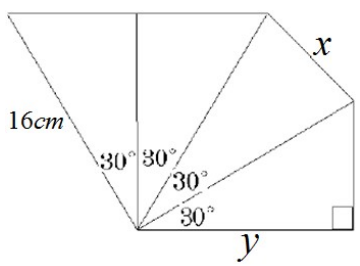
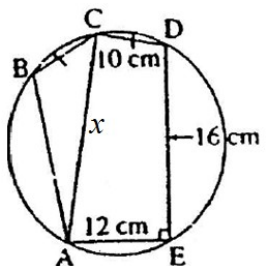
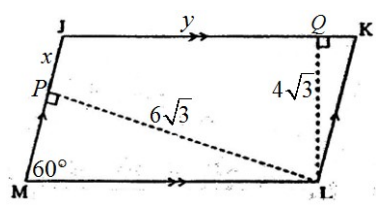
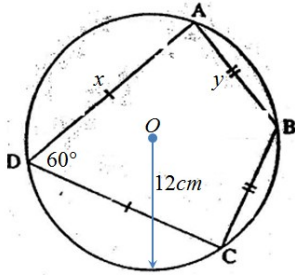
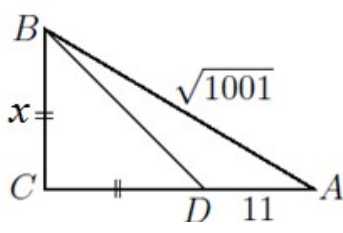
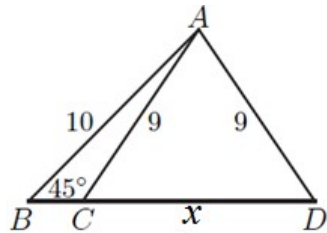
Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Pre Calculus 11 Section 2.1B Special Triangles: 30-60-90 & 45-45-90**

1. Find the values of the missing sides "x" and "y"

|  |  |  |
|--|--|--|
| <p>a) <math>x =</math>      <math>y =</math></p>    | <p>b) <math>x =</math>      <math>y =</math></p>    | <p>c) <math>x =</math>      <math>y =</math></p>    |
| <p>d) <math>x =</math>      <math>y =</math></p>   | <p>e) <math>x =</math>      <math>y =</math></p>   | <p>f) <math>x =</math>      <math>y =</math></p>   |
| <p>g) <math>x =</math>      <math>y =</math></p>  | <p>h) <math>x =</math>      <math>y =</math></p>  | <p>i) <math>x =</math>      <math>y =</math></p>  |

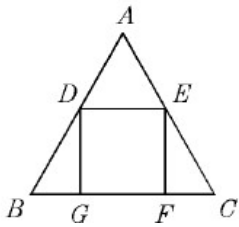
|   |   |  |
|---|---|--|
| <p>J) <math>x =</math>      <math>y =</math></p>   | <p>k) <math>x =</math>      <math>\angle BAC =</math></p>  | <p>l) <math>x =</math>      <math>y =</math></p>  |
| <p>m) <math>x =</math>      <math>y =</math></p>  | <p>n) <math>x =</math></p>                                | <p>o) <math>x =</math></p>                       |

2. An isosceles right triangle has a leg of  $9\sqrt{8}$ . What is its perimeter?

3. A square has a diagonal of length  $10\sqrt{6}$ . What is the perimeter of the square?

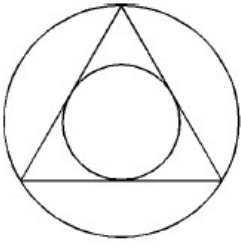
4. In a right triangle, one leg is longer than the other leg by a factor of  $\sqrt{3}$ . If the longer leg is  $9\sqrt{3}$  units long, what is the perimeter of the triangle?

5.  $\triangle ABC$  is an equilateral triangle, and  $DEFG$  is a square of side 10cm. Find the length of a side of  $\triangle ABC$ .



6. If the degree measures of the angles of a triangle are in the “ $x$ ”, “ $2x$ ”, “ $3x$ ”, and the longest side is 12cm long, then find the perimeter of the triangle.

7. In the diagram, the smaller circle has a radius of 10cm. Determine the radius of the larger circle



8. In the diagram,  $AB = BC = AC = 2\sqrt{2}$ ,  $CD = DE$ ,  $\angle CDE = 60^\circ$  and  $\angle EAB = 75^\circ$ . Determine the perimeter of figure ABCDE.

