

## Skill Builder

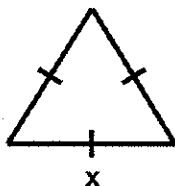
# 4 The Perimeter of a Regular Polygon

EVALUATED



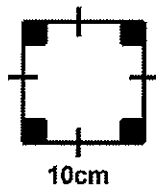
- 1** An equilateral triangle has a side length of 4cm. Calculate the triangle's perimeter.
- 

- 2** The perimeter of the equilateral triangle given below is 36cm. Determine the value of  $x$ .



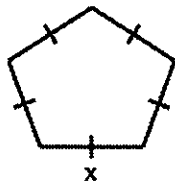
- 3** A square has a side length of 5cm. Calculate the square's perimeter.
- 

- 4** Calculate the perimeter of the square given below.

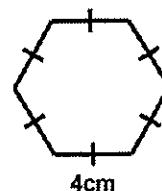


- 5** A regular pentagon has a side length of 9cm. Calculate the pentagon's perimeter.
- 

- 6** The perimeter of the regular pentagon given below is 60cm. Determine the value of  $x$ .

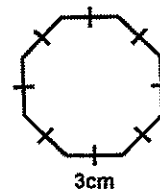


- 7** Calculate the perimeter of the regular hexagon given below.

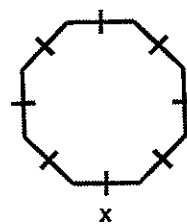


- 8** A regular hexagon has a side length of 8cm. Calculate the hexagon's perimeter.
- 

- 9** Calculate the perimeter of the regular octagon given below.



- 10** The perimeter of the regular octagon given below is 40cm. Determine the value of  $x$ .







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

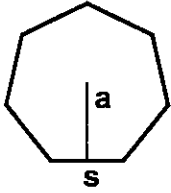
Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

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

**Identify and Calculate the Area and Perimeter for each Polygon.**

1)



$s = 2.8 \text{ mm}$

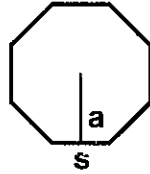
$a = 2.9071 \text{ mm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

2)



$s = 5.4 \text{ cm}$

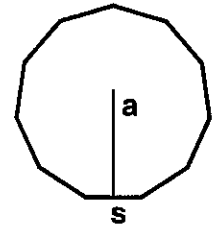
$a = 6.5184 \text{ cm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

3)



$s = 3.3 \text{ cm}$

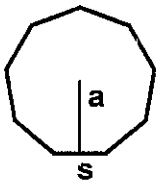
$a = 5.6194 \text{ cm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

4)



$s = 2.5 \text{ cm}$

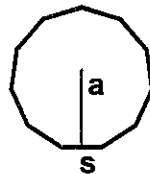
$a = 3.4343 \text{ cm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

5)



$s = 2.4 \text{ mm}$

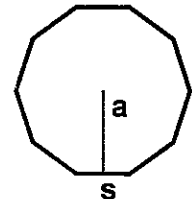
$a = 4.0868 \text{ mm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

6)



$s = 3 \text{ mm}$

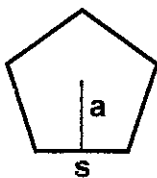
$a = 4.6165 \text{ mm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

7)



$s = 5.8 \text{ cm}$

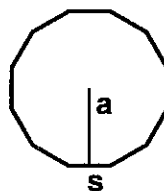
$a = 3.9915 \text{ cm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

8)



$s = 2.7 \text{ cm}$

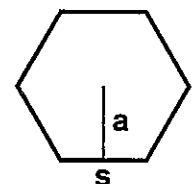
$a = 5.0383 \text{ cm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

Type: \_\_\_\_\_

9)



$s = 6.7 \text{ mm}$

$a = 5.8024 \text{ mm}$

Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

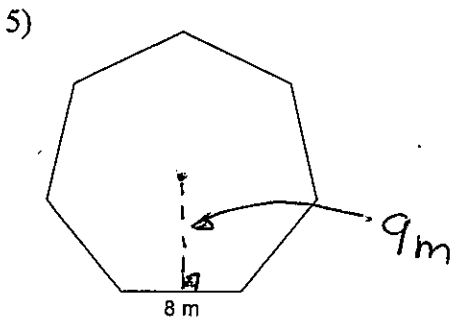
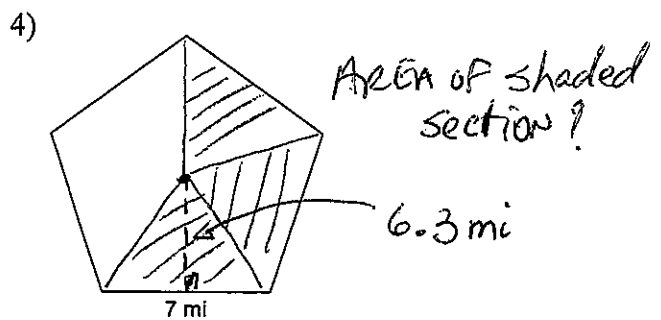
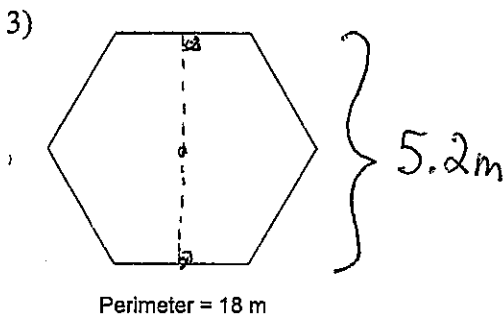
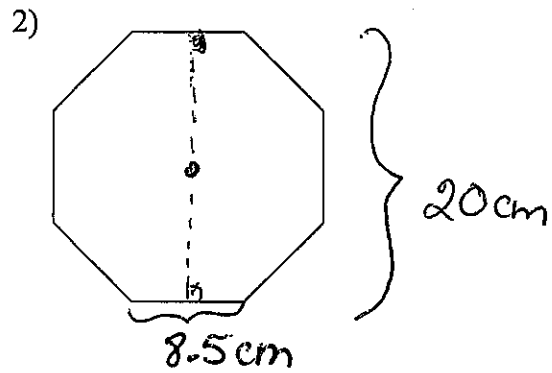
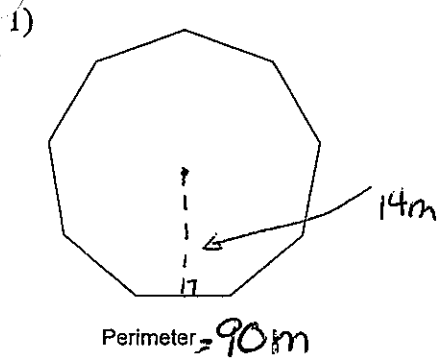
Type: \_\_\_\_\_



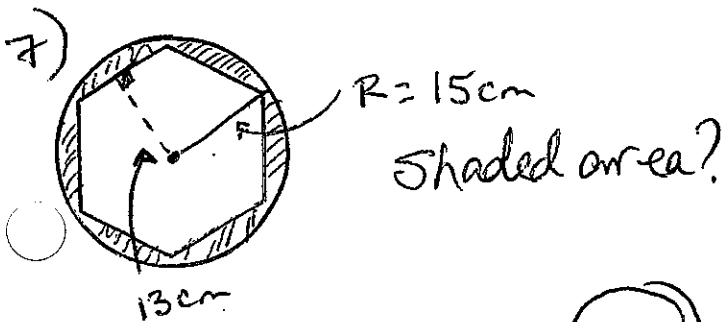


# Assignment

Find the area of each figure.



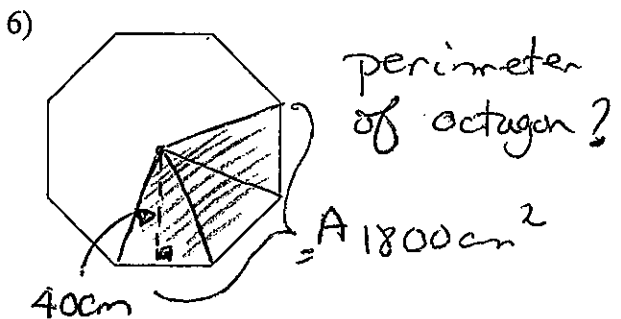
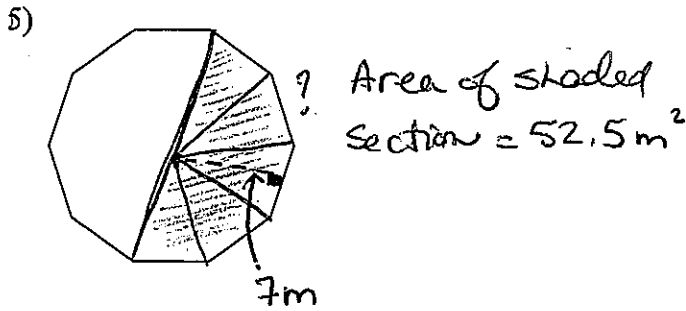
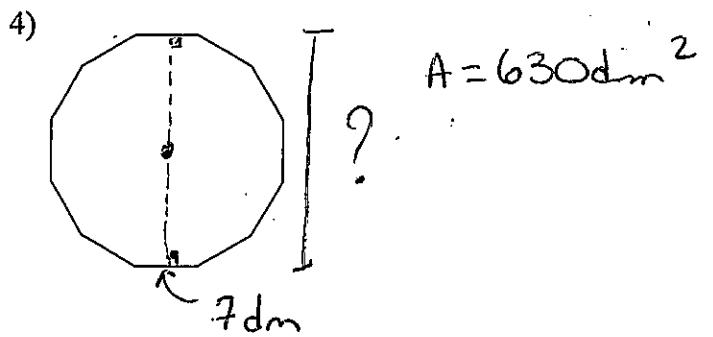
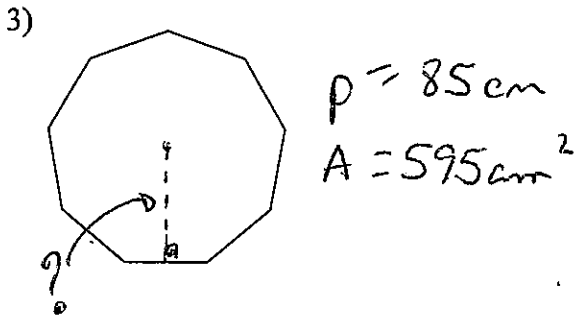
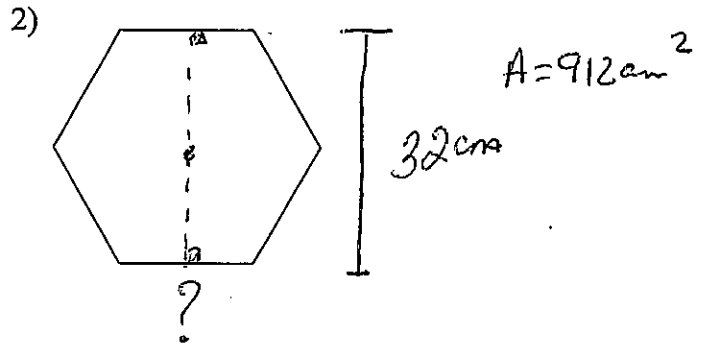
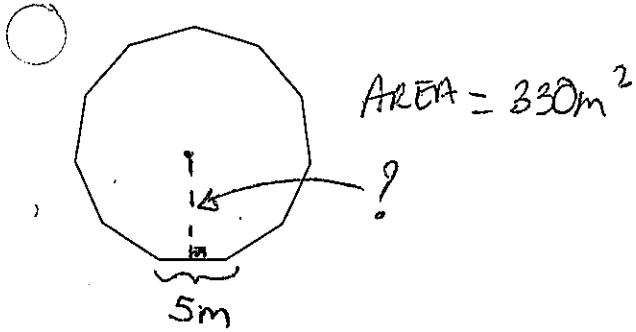
6) A polygon whose Total int<sup>l</sup> degrees is  $1800^\circ$ , a perimeter of 60mm and an apothem of 7mm.



Assignment

AREA BACKWARDS.

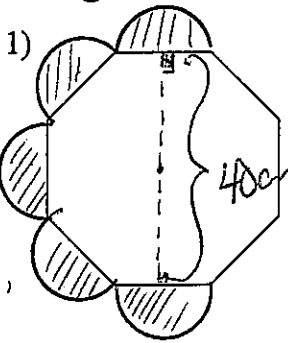
Date \_\_\_\_\_ Period \_\_\_\_\_

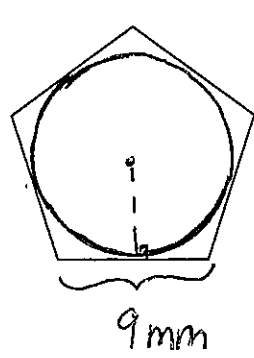


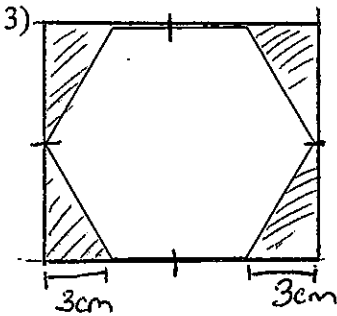
7) A polygon has an area of  $468m^2$ , an exterior angle of  $30^\circ$ , sides of  $6m$  .... What is the apothem length?

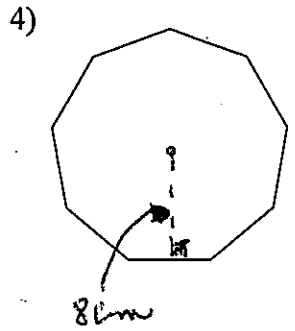


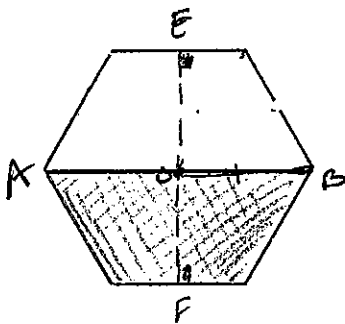
Assignment

1)  AREA of 5 petals =  $384.84 \text{ cm}^2$   
AREA of Octagon?

2)  Circle  $C = 47.125 \text{ mm}$   
AREA of Pentagon?

3)  perimeter of square  $64 \text{ cm}$   
Shaded area?

4)   $P = ?$   
 $A = 396 \text{ cm}^2$

  $\overline{AB} = 12 \text{ cm}$   
 $\overline{EF} = 10.39 \text{ cm}$   
AREA of shaded region?