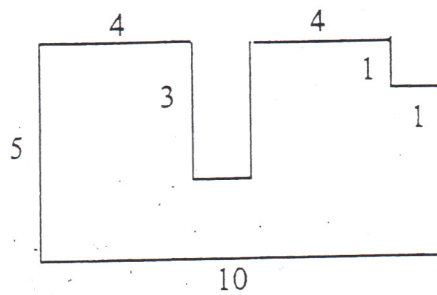
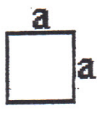


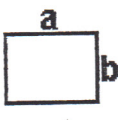
January 16, 2013  
 Math Bowl – Area, surface area

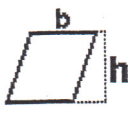
1. Find the area of the figure below:

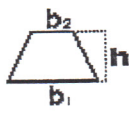



**Area** = The area of a figure measures the size of the region enclosed by the figure. The formulas for area are different depending on the figure. Area is measured in square units like  $\text{in}^2$  or  $\text{cm}^2$ .

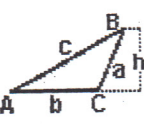
square =  $a^2$  

rectangle =  $ab$  

parallelogram =  $bh$  

trapezoid =  $\frac{h}{2} (b_1 + b_2)$  

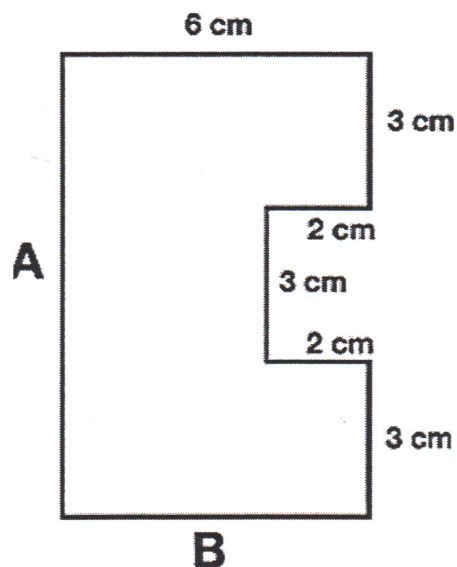
circle =  $\pi r^2$  

triangle =  $\frac{1}{2} bh$  

Perimeter = The perimeter of a polygon is the sum of the lengths of all its sides.

Perimeter is measured in regular units like in. or cm.

## Perimeter



What is the length of side B? \_\_\_\_\_

Explain how you found the length of side B.

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What is the length of side A? \_\_\_\_\_

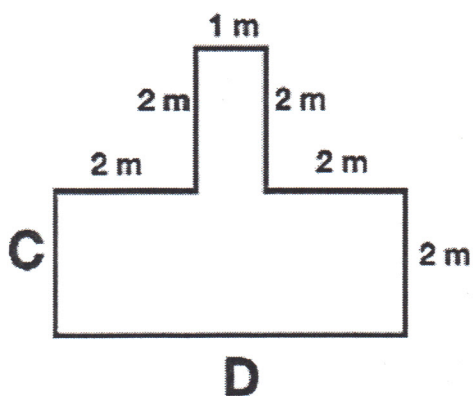
Explain how you found the length of side A.

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What is the perimeter of the shape? \_\_\_\_\_



What is the length of side C? \_\_\_\_\_

Explain how you found the length of side C.

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What is the length of side D? \_\_\_\_\_

Explain how you found the length of side D.

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What is the perimeter of the shape? \_\_\_\_\_

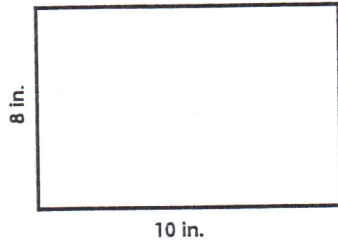
# Geometry Review

Find the perimeter and area of each figure.

A.)

P = \_\_\_\_\_

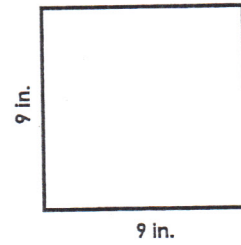
A = \_\_\_\_\_



B.)

P = \_\_\_\_\_

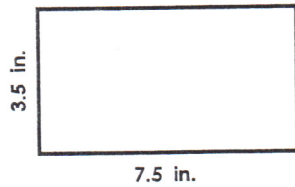
A = \_\_\_\_\_



C.)

P = \_\_\_\_\_

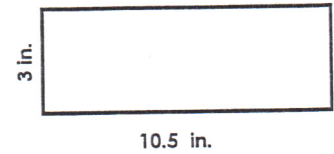
A = \_\_\_\_\_



D.)

P = \_\_\_\_\_

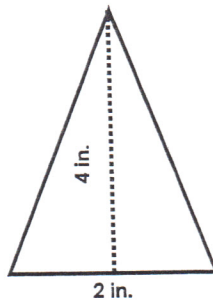
A = \_\_\_\_\_



Find the area of each triangle.

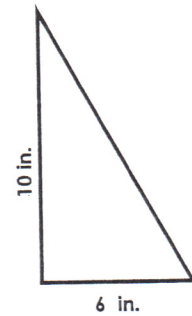
E.)

A = \_\_\_\_\_



F.)

A = \_\_\_\_\_



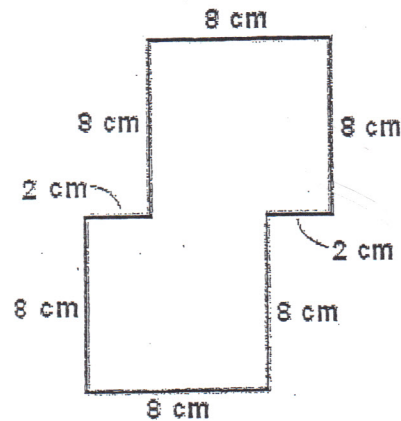
Question 1

The perimeter of a regular octagon is 64 cm. What is the length of one side of the octagon?

- A. 4 cm
- B. 16 cm
- C. 12 cm
- D. 8 cm

Question 2

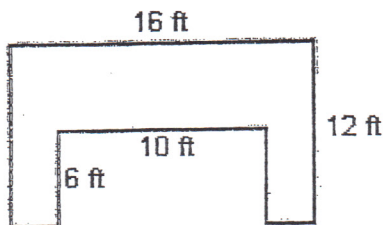
Find the area of the figure shown below.



- A. 64 sq cm
- B. 128 sq cm
- C. 48 sq cm
- D. 124 sq cm

Question 3

Find the area of the figure shown below.



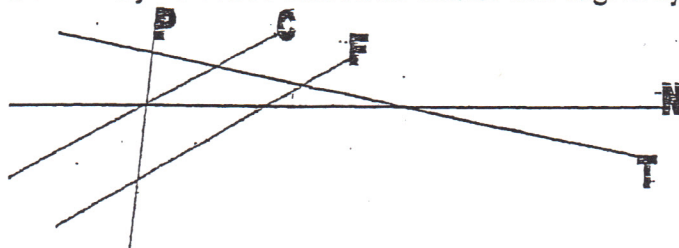
- A. 48 square feet
- B. 32 square feet
- C. 56 square feet
- D. 132 square feet

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

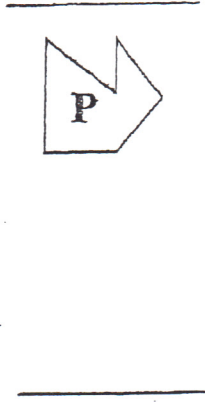
School: \_\_\_\_\_

**Event 3: Geometry**

1. In the county of West Chestnut which two highways are parallel?



2. Which of the following represents a 180° rotation of figure P?



(A)



(B)

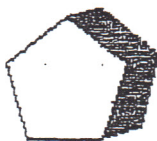


(C)

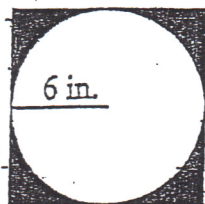


(D)

3. How many edges does a pentagonal prism have?



4. Find the area of the shaded region of the square. Circle has a radius 6 in.



\_\_\_\_\_