

Answers to #13

# MEMORIES FROM BOOT CAMP 1

1) FILL IN THE CHARTS BELOW:

Number of Sides	Name of Polygon
3	triangle
4	quadrilateral
5	pentagon
6	hexagon
7	Septagon <sup>or</sup> heptagon
8	octagon

Number of Sides	Name of Polygon
9	Nonagon
10	Decagon

2) In a quadrilateral, each of two angles has a measure of  $37^\circ$ . Another angle has a measure of  $118^\circ$ . What is the measure of the remaining angle?

$$\begin{array}{r} 37 \\ + 37 \\ 118 \\ \hline 192^\circ \end{array}$$

$$\begin{array}{r} 360 \leftarrow \text{all quads have } 360^\circ \\ - 192 \\ \hline 168^\circ \end{array}$$

2) FIND THE AREA OF THE FIGURE.

Figure A

$$A = bh$$

$$(3)(4)$$

$$12 \text{ in}^2$$

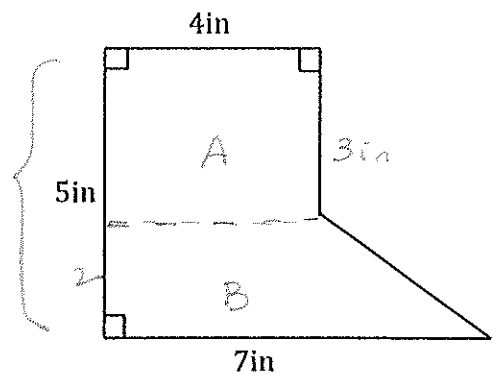
Figure B

$$\frac{(B+b)h}{2}$$

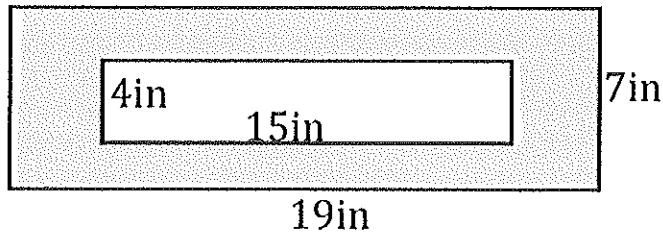
$$\frac{(7+4)(2)}{2} = \frac{(11)(2)}{2}$$

$$\frac{22}{2} = 11 \text{ in}^2$$

$$12 + 11 = \boxed{23 \text{ in}^2}$$



3) FIND THE AREA OF THE SHADED REGION.



whole rect =  
 $19 \times 7 = 133 \text{ in}^2$

White rect =  
 $4 \times 15 = 60 \text{ in}^2$

$133 - 60 = 73 \text{ in}^2$

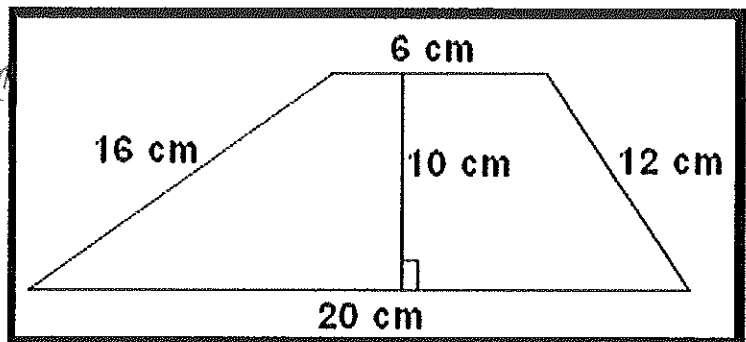
4) FIND THE PERIMETER AND AREA:

$P = 6 + 12 + 20 + 16 = 54 \text{ cm}$

A =

$\frac{(B+b) \cdot h}{2} = \frac{(6+20)(10)}{2}$

$\frac{(26)(10)}{2} = \frac{260}{2} = 130 \text{ cm}^2$



5) PERIMETER OR AREA?

P APPLYING A DECORATED STRIP ALONG THE EDGE OF A PLANTER.

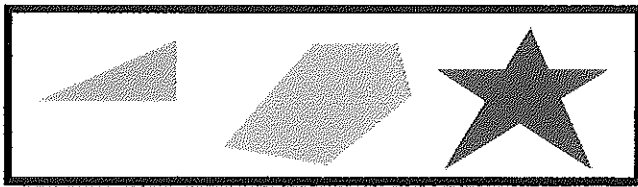
P A LOW RAIL AROUND A FLOWER GARDEN.

A THE SPACE IN A PARKING LOT NEEDS TO BE ENOUGH TO HOLD ALL THE CARS.

P HANGING A BANNER ALL AROUND OUR CLASSROOM.

A THE SIZE OF THE LAND THAT MY HOUSE SITS ON..

6) JUST BY LOOKING AT THESE POLYGONS: WHICH SET HAS REGULAR POLYGONS AND WHICH SET DOES NOT. EXPLAIN WHY.



Regular;  
Congruent sides  
Congruent angles.

7) WHAT IS A DIAGONAL OF A POLYGON?  
WHICH POLYGON HAS NO DIAGONALS? WHY?

Diagonal - connects 2 vertices  
Cannot be a side

Triangle has no diagonals. There are no 2 vertices that can be connected without it being a side.

8) WHAT IS THE MEASURE OF X?

$$75 + 100 + 110 = 285$$

all  
quad.  
have  $\angle$ 's  
that =  $360^\circ$

$$\begin{array}{r} \rightarrow 360 \\ - 285 \\ \hline \boxed{75^\circ} \end{array}$$

