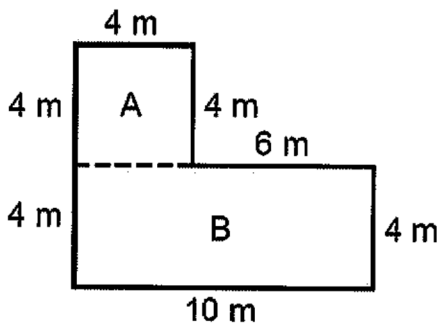


# Area of Irregular Shapes

Divide the irregular figure into regular figures.

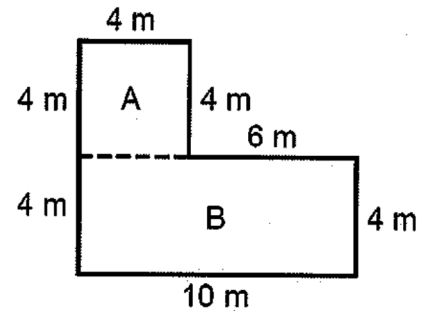


Look for missing measurements that you will need to find the area of each new regular figure.

This side was 8 m but because you split it to make two regular rectangles, look carefully at every side of the figure to see what the new measurements will be!

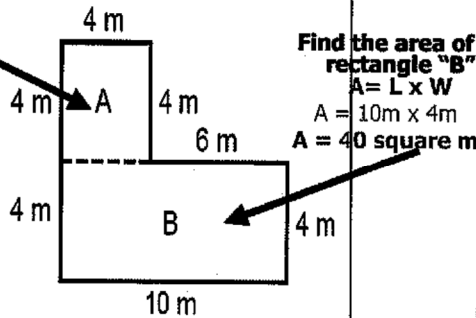
**Don't forget the rule, opposite sides are equal!**

This will help you find the missing measurements!



Find the area of every regular figure.

**Find the area of rectangle "A"**  
 $A = L \times W$   
 $A = 4m \times 4m$   
 $A = 16 \text{ square m}$



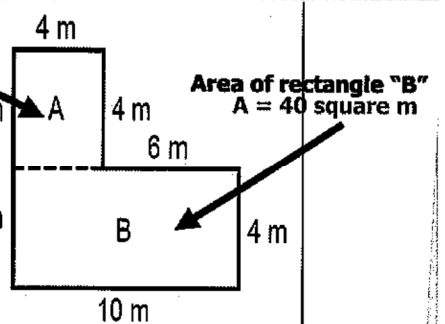
**Find the area of rectangle "B"**  
 $A = L \times W$   
 $A = 10m \times 4m$   
 $A = 40 \text{ square m}$

Add the areas of every regular figure.

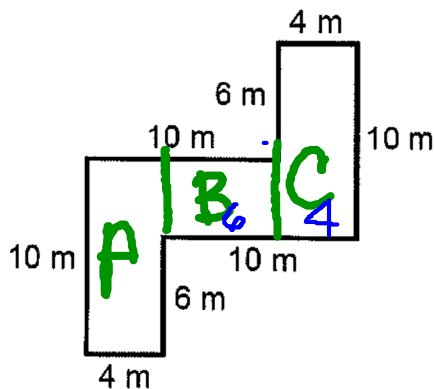
**Area of rectangle "A"**  
 $A = 16 \text{ square m}$

$40 \text{ square m}$   
 $+ 16 \text{ square m}$   
 $56 \text{ square m}$

The total area is 56 square m.



**Find the area of this figure:**



Work:

$$A = 10 \cdot 4 = 40$$

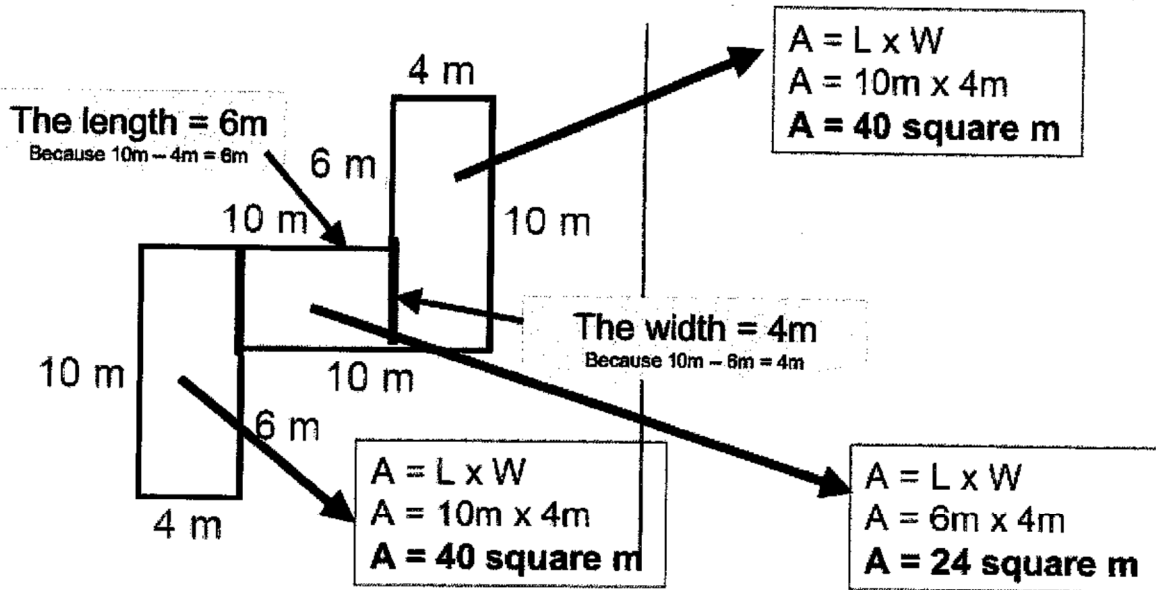
$$B = 6 \cdot 4 = 24$$

$$C = 10 \cdot 4 = 40$$

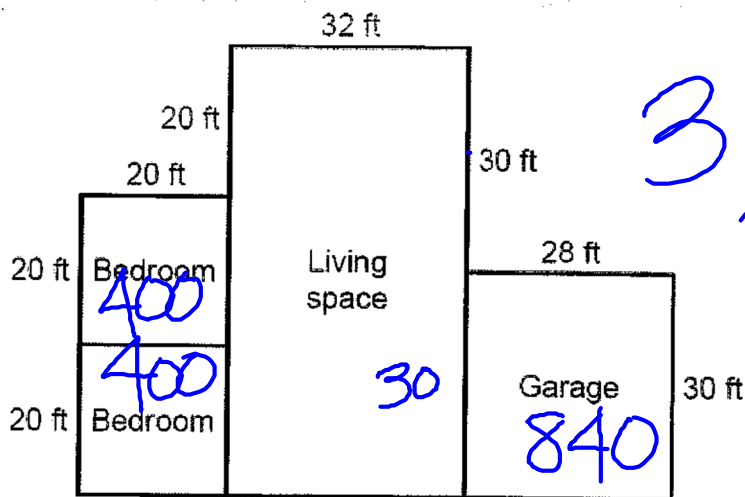
Area: \_\_\_\_\_

$$104 \text{ m}^2$$

# Work it out like this...



# Try another one...



3,560 ft<sup>2</sup>

Work:

$$L.S. = 32 \cdot 60 = 1,920$$

$$G = 30 \cdot 28 = 840$$

Area:

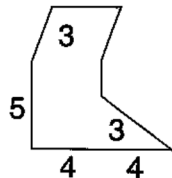
$$Bd = 20 \cdot 20 = 400$$

400

**LESSON** **Reteach**  
**10-3 Area of Composite Figures**

Sometimes you can use area formulas you know to help you find the area of other figures.

To find the area of the figure below, first divide the figure into figures you know.



The figure is made up of a triangle, a parallelogram, and a rectangle.

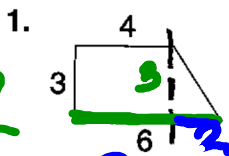
Next, find the area of each figure.

Triangle	Parallelogram	Rectangle
$A = \frac{1}{2}bh$	$A = bh$	$A = \ell w$
$= \frac{1}{2}(3 \cdot 4)$	$= 3 \cdot 4$	$= 4 \cdot 5$
$= 6$	$= 12$	$= 20$

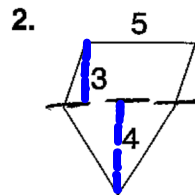
Then, find the sum of all of the areas.

$6 + 12 + 20 = 38$  The area of the figure is 38 square units.

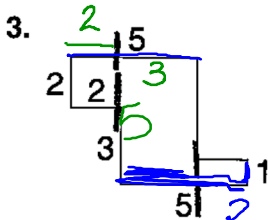
Find the area of each figure.



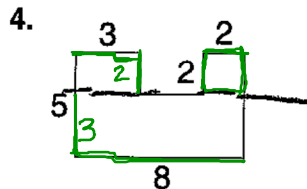
1:  $4 \cdot 3 = 12$   
 2:  $3 \cdot 2 \div 2 = 3$   
 $A = 12 + 3 = 15 \text{ units}^2$



1:  $5 \cdot 3 = 15$   
 2:  $5 \cdot 4 \div 2 = 10$   
 $A = 15 + 10 = 25 \text{ units}^2$



1:  $2 \cdot 2 = 4$   
 2:  $5 \cdot 3 = 15$   
 3:  $2 \cdot 1 = 2$   
 $A = 4 + 15 + 2 = 21 \text{ units}^2$



1:  $3 \cdot 2 = 6$   
 2:  $2 \cdot 2 = 4$   
 3:  $8 \cdot 3 = 24$   
 $A = 24 + 6 + 4 = 34 \text{ units}^2$