$\qquad$

## Area of Composite Shapes Lesson

Problem: Find the area of the figure below.


Solution: The compound shape may be split into two rectangles $A$ and $B$ as shown in figure below:


You now have 2 rectangles. If you find the area of each rectangle and add them, you will have the total area of the figure.

$$
\begin{aligned}
& \text { Area of } A=(10 \times 10)=100 \mathrm{sq} \text {. inches } \\
& \text { Area of } B=(20 \times 10)=200 \text { sq. inches }
\end{aligned}
$$

Total area of the compound shape $=$ Area of square $A+$ Area of square $B=\mathbf{3 0 0} \mathbf{s q}$. inches

## Area of Composite Shapes Advanced Guided Lesson

1. Find the area of the compound figure below

2. Find the area of the complex figure below.

$\qquad$

## Area of Composite Shapes Advanced Guided Lesson Explanation

Answer 1: The figure above has two regular shapes: a square and a semi-circle. Find the area for each of those two shapes and add them to find the total area.

Area of square $=4 \times 4=16$ square $\mathbf{c m}$
Area of semi-circle $=1 / 2 \times 3.14 \times 2 \times 2=6.28$ square $\mathbf{c m}$

Total Area $=$ Area of square + Area of semi-circle

Total Area $=16$ square $\mathrm{cm}+6.28$ square $\mathrm{cm}=22.28$ square cm

Answer 2: The complex shape can be split into a rectangle $\mathbf{A}$ ( $15 \times 12$ ) and a triangle $B$ with a base of 7 and a height of $\mathbf{1 2} \mathbf{~ c m}$. Again, find the area of each regular shape and add them.


Area of rectangle $=180$ square $\mathbf{c m}$
Area of triangle $=1 / 2 \times$ base $\times$ height $=1 / 2 \times 7 \times 12=42$ square $\mathbf{c m}$
Total area of the figure $=$ Area of rectangle + Area of triangle
Total area of the figure $=180$ square $\mathbf{c m}+42$ square $\mathbf{c m}$
Total area of the figure $=\mathbf{2 2 2}$ square $\mathbf{c m}$
$\qquad$

## Area of Composite Shapes Practice Worksheet 1

1. Find the area of the shaded region of the figure below. Each small square is $\mathbf{1} \mathbf{~ c m ~} \mathbf{x} \mathbf{1 c m}$.

2. A piece of cardboard is cut in an L-shape as shown below. Find the total area of the cardboard.

3. Find the area of the shaded region of the figure below.


Tons of Free Math Worksheets at: © www.MathWorksheetsLand.com Date $\qquad$
4. Find the area of the compound figure below.

5. Find the total area of the composite shape below.
4.0 mm


Tons of Free Math Worksheets at: © www.MathWorksheetsLand.com

