

## LESSON 28: Area

Here is the key to **S356**.

## Homework

Name \_\_\_\_\_ Date \_\_\_\_\_

**Directions:** Complete the following SOLVE problem.Steven is working on his geometry project. | He creates a ten-sided figure with the following dimensions. | What is the area of the irregular figure?**S** Underline the question.

This problem is asking me to find **the area of the irregular figure**.

**O** Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

**dimensions given in the figure**

**L** Write in words what your plan of action will be. **Divide the figure into triangles and rectangles.**

**Find the area of each smaller figure and add to find the area of the irregular shape.**

Choose an operation or operations. **Multiplication, addition****V** Estimate your answer. **About 100 in.<sup>2</sup>**Carry out your plan.  $A = lw + lw + lw + A = \frac{1}{2}bh$ 

$$A = (3)(2) + (6)(5) + (10)(6) + \frac{1}{2}(5)(6); A = 6 + 30 + 66 + 15;$$

$$A = 111 \text{ in.}^2$$
**E** Does your answer make sense? (Compare your answer to the question.) **Yes, because we were looking for the area of the irregular figure.**Is your answer reasonable? (Compare your answer to the estimate.) **Yes, because it is close to our estimate of about 100 inches squared.**Is your answer accurate? (Check your work.) **Yes.**Write your answer in a complete sentence. **The area of the irregular shape is 111 in.<sup>2</sup>.**