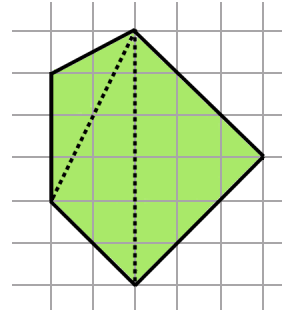


# Area of Polygons

To calculate the **area of polygons**, all you have to do is divide them into easy shapes, such as rectangles and triangles. Calculate the area separately of each easy shape, and add them to find the total area.

1. This figure is called a \_\_\_\_\_.

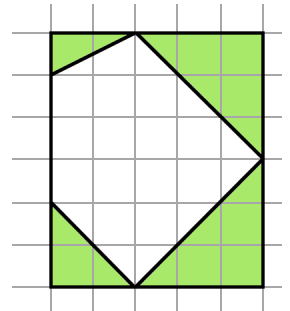
Calculate its area using the three triangles.  
For each triangle, use the *vertical* side as the base.



2. Here is another way of calculating the area of the same figure.

1. Calculate the area of the rectangle that encloses the figure.
2. Calculate the areas of the four shaded triangles.
3. Subtract.

Use this method and verify that you get the same result as above.

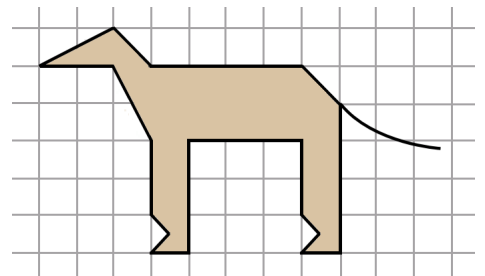


3. Find the areas of the shaded figures.

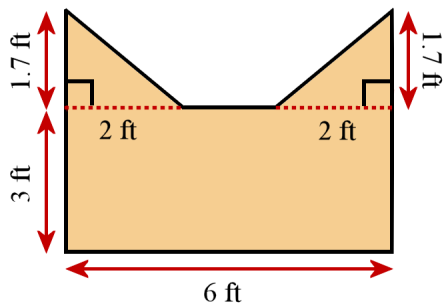
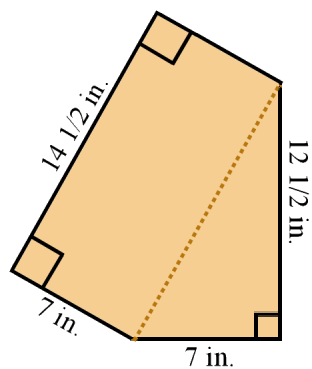
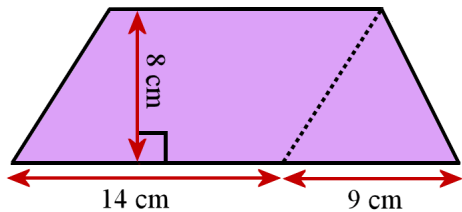
<p><b>a.</b></p>	<p><b>b.</b></p>
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4. **a.** The side of each little square in the drawing on the right is 1 inch. Find the area of the polygon.

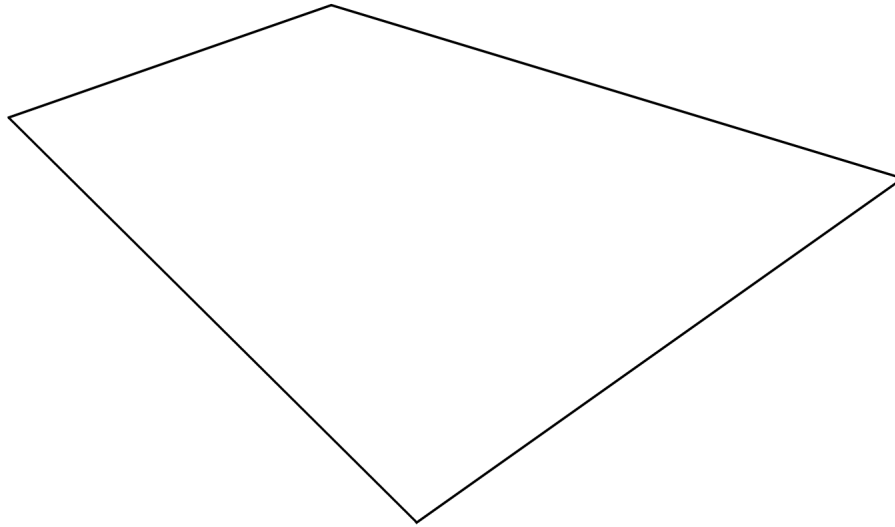
**b.** Imagine that the side of each little square is 2 inches instead. What is the area now?



5. Calculate the total area of the figures.



6. Divide this quadrilateral into two triangles, and then find its area in square centimeters.  
You may use a calculator.



## Puzzle Corner

Measure what you need to from this star to find: (a) its perimeter in centimeters and (b) its area in square centimeters.

