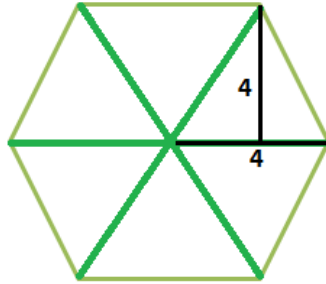


Determining the Area of Regular/Irregular Polygons

In this worksheet, we will practice determining the area of irregular and regular polygons by the composition and decomposition of rectangles and triangles.

For example, find the area of the hexagon below.



The figure gives you the base and height of one triangle. The hexagon is made up of 6 equal triangles.

First, find the area of a triangle ($\frac{1}{2}b \times h = \frac{1}{2} \times 4 \times 4 = 2 \times 4 = 8$)

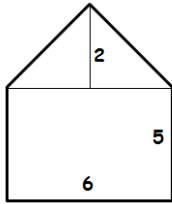
Then, multiply the area of one triangle (8) by the number of triangles (6)

$6 \times 8 = 48$, so the area of the hexagon is 48.

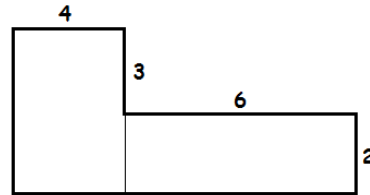
(Note: some of the figures are not drawn to scale.)

Exercise Questions:

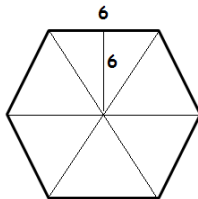
1. Find the area of the pentagon below.



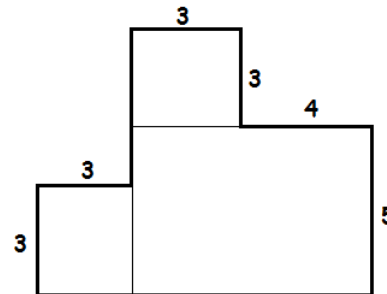
4. Find the area of the polygon below.



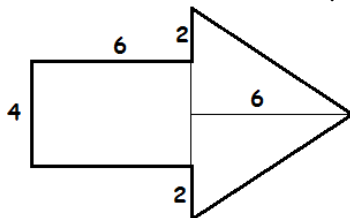
2. Find the area of the hexagon below.



5. Find the area of the polygon below.



3. Find the area of the polygon below.



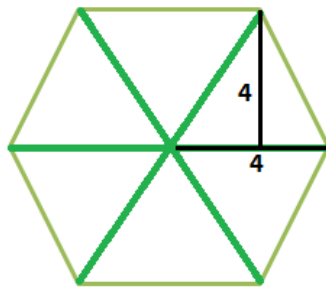


Answer Key

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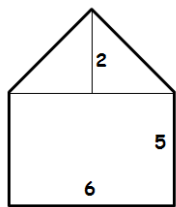
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$6 \times 8 = 48$, so the area of the hexagon is 48.

(Note: some of the figures are not drawn to scale.)

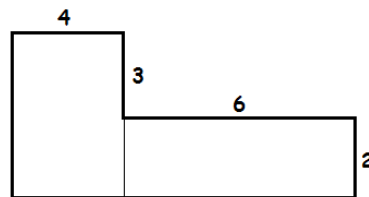
Exercise Questions:

1. Find the area of the pentagon below.



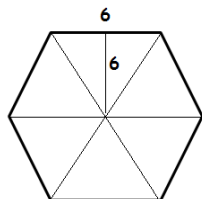
36 units²

4. Find the area of the polygon below.



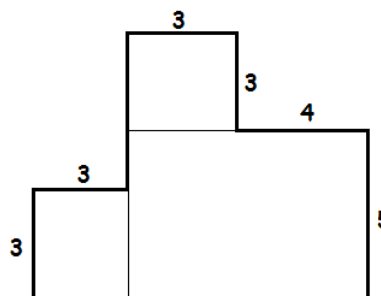
32 units²

2. Find the area of the hexagon below.



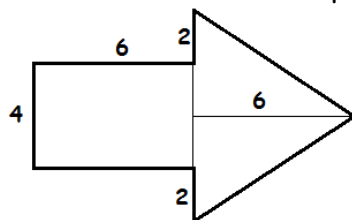
108 units²

5. Find the area of the polygon below.



53 units²

3. Find the area of the polygon below.



48 units²



Answer Key

