* The **perimeter** *P* of a plane figure is the sum of the side lengths of the figure.
* The **area** *A* of a plane figure is the number of non-overlapping square units of a given size that exactly cover the figure.



* The **base *b*** can be any side of a triangle. The **height *h*** is a segment from a vertex that forms a right angle with a line containing the base. The height may be a side of the triangle or in the interior or the exterior of the triangle.





**EX 1:**  **Find the perimeter and area of each figure.**



**EX 2:** **Find the perimeter and area of each figure.**



**EX 3:** **Find the perimeter and area of a square with s = 3.5 in.**

* In a circle a **diameter** is a segment that passes through the center of the circle and whose endpoints are on a circle. A **radius** of a circle is a segment whose endpoints are the center of the circle and a point on the circle. The **circumference** of a circle is the distance around the circle.





* The ratio of a circle’s circumference to its diameter is the same for all circles. This ratio is represented by the Greek letter π (pi). The value of π is irrational. Pi is often approximated as 3.14 or  .

**EX 4:** **Find the circumference and area of a circle with radius 8 cm. Use the πkey on your calculator.**

**Then round the answer to the nearest tenth.**

**EX 5:** **The area of a rectangle is 74.82 in2, and the length is 12.9 in. Find the width.**

**WARM UP:**