NAME Enrich DATE \_\_\_\_\_ PERIOD \_\_

## Heron's Formula

A formula named after Heron of Alexandria, Egypt, can be used to find the area of a triangle given the lengths of its sides.

Heron's formula states that the area A of a triangle whose sides measure a, b, and c is given by

$$A = \sqrt{s(s-a)(s-b)(s-c)} ,$$

where *s* is the semiperimeter:

$$s = \frac{a+b+c}{2}.$$

Estimate the area of each triangle by finding the mean of the inner and outer measures. Then use Heron's Formula to compute a more exact area. Give each answer to the nearest tenth of a square unit.



Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.