## Lesson 9 Practice Problems

1. Select all drawings in which a corresponding height $h$ for a given base $b$ is correctly identified.
A


C

D

E

F

A. A
B. B
C. C
D. D
E. E
F. F
2. For each triangle, a base and its corresponding height are labeled.

a. Find the area of each triangle.
b. How is the area related to the base and its corresponding height?
3. Here is a right triangle. Name a corresponding height for each base.

4. Find the area of the shaded triangle. Show your reasoning.

(From Unit 1, Lesson 8.)
5. Andre drew a line connecting two opposite corners of a parallelogram. Select all true statements about the triangles created by the line Andre drew.

A. Each triangle has two sides that are 3 units long.
B. Each triangle has a side that is the same length as the diagonal line.
C. Each triangle has one side that is 3 units long.
D. When one triangle is placed on top of the other and their sides are aligned, we will see that one triangle is larger than the other.
E. The two triangles have the same area as each other.
(From Unit 1, Lesson 7.)
6. Here is an octagon. (Note: The diagonal sides of the octagon are not 4 inches long.)

(From Unit 1, Lesson 3.)
a. While estimating the area of the octagon, Lin reasoned that it must be less than 100 square inches. Do you agree? Explain your reasoning.
b. Find the exact area of the octagon. Show your reasoning.
