Area of Triangles

Find the area of each triangle.

1.

10 ft

8 ft

40 ft²

2.

3.6 yd
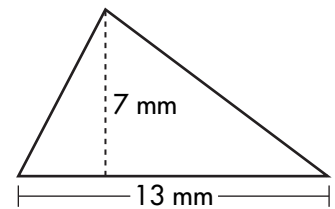
6 yd

10.8 yd²

3.

7 mm

13 mm
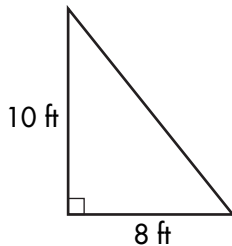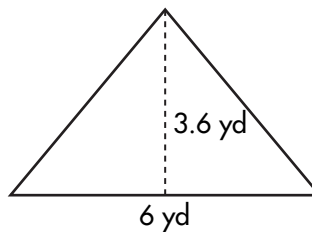
45.5 mm²

4. Number Sense What is the base measurement of a triangle with an area of 30 m² and a height of 10 m?

6 m

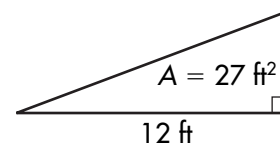**Algebra** Find the missing measurement for each triangle.

5. $A = 36$ mi², $b =$ **6 mi** , $h = 12$ mi

6. $A =$ **45 mm²** , $b = 12$ mm, $h = 7.5$ mm

7. List three sets of base and height measurements for triangles with areas of 30 square units.

Sample answer: $b = 4$, $h = 15$; $b = 6$, $h = 10$; $b = 8$, $h = 7.5$

8. Which is the height of the triangle?

(A) 4.5 ft   **C** 8 ft

B 6 ft   **D** 9 ft

$A = 27$ ft²

12 ft

9. Explain It Can you find the base and height measurements for a triangle if you know that the area is 22 square units? Explain why or why not.

No; Sample answer: You need to know at least 2 of the measurements of the base, the height, and the area.