# Practice 9-5

**Trigonometry and Area**

**Find the area of each polygon. Round your answers to the nearest tenth.**

1. an equilateral triangle with apothem 5.8 cm

2. a square with radius 17 ft

3. a regular hexagon with apothem 19 mm
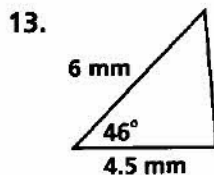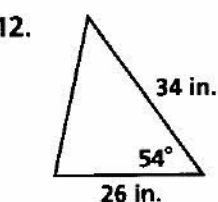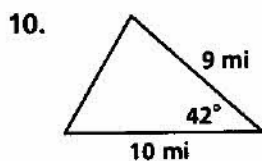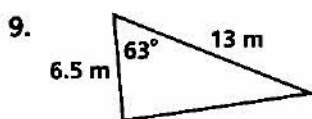
4. a regular pentagon with radius 9 m

5. a regular octagon with radius 20 in.

6. a regular hexagon with apothem 11 cm

7. a regular decagon with apothem 10 in.

8. a square with radius 9 cm

**Find the area of each triangle. Round your answers to the nearest tenth.**

9.

63°  13 m
6.5 m

10.

9 mi
42°
10 mi

11.

38°  18 km
10 km

12.

34 in.
54°
26 in.

13.

6 mm
46°
4.5 mm

14.

28 in.  59°  32 in.

15.

10 cm
35°
19 cm

16.

5 ft
65°
4 ft

17.

15 m
46°
15 m
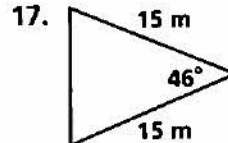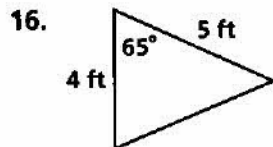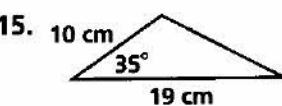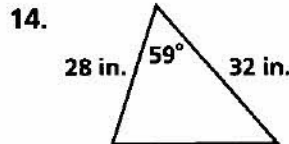
**Find the area of each regular polygon to the nearest tenth.**

18. a triangular dog pen with apothem 4 m

19. a hexagonal swimming pool cover with radius 5 ft

20. an octagonal floor of a gazebo with apothem 6 ft

21. a square deck with radius 2 m

22. a hexagonal patio with apothem 4 ft