Name_____ Date_____

Chapter 8 Review - Part 2

Complete the following trigonometric ratios for what they represent.
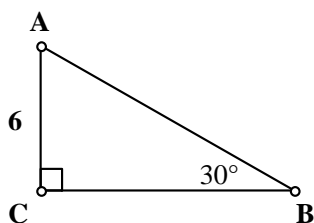
1) $\sin \theta =$

2) $\cos \theta =$

3) $\tan \theta =$

4) What is $\sin 40°$ to the nearest ten-thousands place?

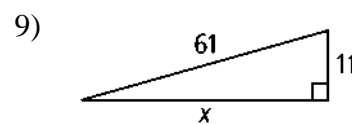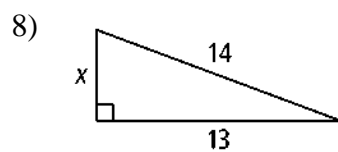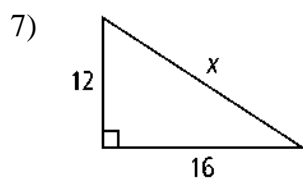5) Find x to the nearest degree:

$$\cos x = .2179$$

6) For the following, express your answer exactly. DO NOT ROUND (Please rationalize denominators).
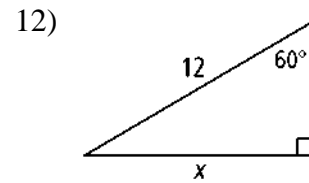

a) $\tan B =$ _____

b) $\sin B =$ _____

Find the value of x. Express your answer in simplest radical form.

7)

8)

9)

10)

11)

12)
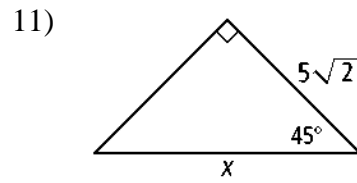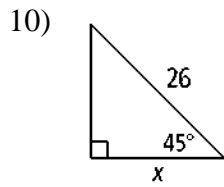
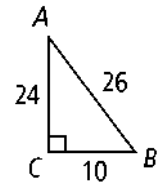Find each ratio in simplified fraction (exact) form.

13) sin B

14) cos B

15) tan A

Given the lengths of the sides of a triangle, identify the triangle as *acute, right,* or *obtuse.*

16) 9, 40, 41
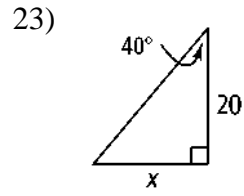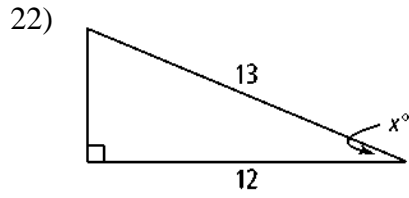
17) 10, 16, 20

18) 12, 15, 18

For each pair of numbers, find a third whole number such that the three numbers form a Pythagorean triple.

19) 33, 55

20) 42, 58

21) 60, 65

Find the value of x. Round lengths to the nearest tenth and angle measures to the nearest degree.
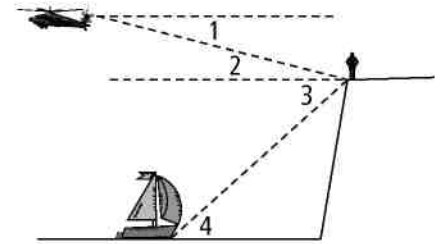
22)

13

12

$x°$

23)

40°

20

x

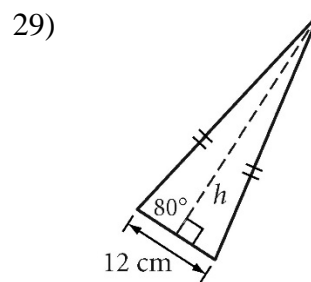What is the description of each angle as it relates to the diagram?

24) $\angle 1$
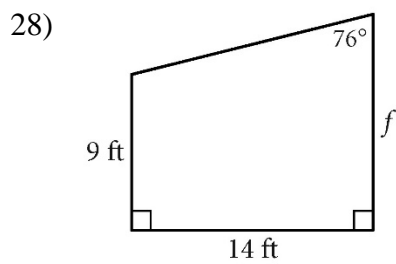
25) $\angle 2$

26) $\angle 3$

27) $\angle 4$

1

2

3

4

Find the value of the missing vairable. Round lengths to the nearest tenth.

28)

76°

9 ft

f

14 ft

29)

80°

h

12 cm

30) A town recreation hall needs to build a ramp. The height of the ramp must be 2 ft. The ramp will start 6 ft from the door. To the nearest tenth of a foot, how long will the ramp be?

31) A ladder 7 m long stands on level ground and makes a 73° angle with the ground as it rests against a wall. How far from the wall is the base of the ladder?
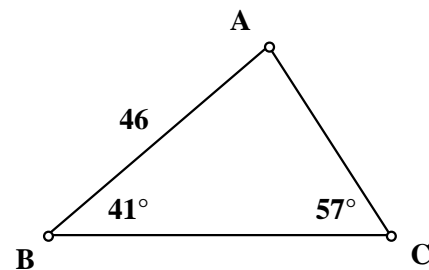
32) To site the top of a building 1000 feet away, you look up 24° from the horizontal. What is the height of the building?

33) A guy wire is anchored 12 feet from the base of a pole. The wire makes a 58° angle with the ground. How long is the wire?
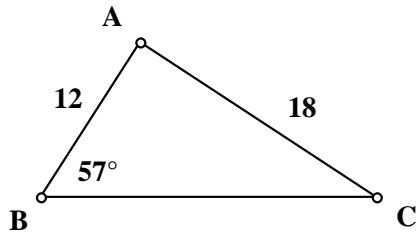
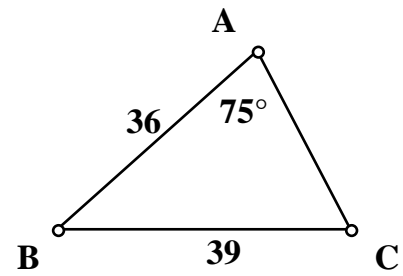34) Find the length of side BC to the nearest unit.
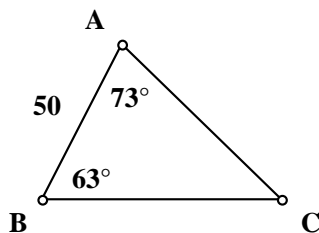
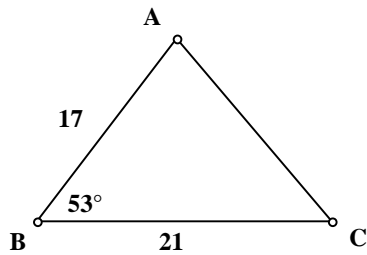35) Find the length of side AC to the nearest unit.

36) Find the measure of angle A to the nearest degree.

A

12

18

57°

B

C

37) Find the measure of angle B to the nearest degree.

A

36

75°

B

39

C

38) Find the measure of side AC.

A

17

53°

B

21

C

39) A parallelogram has side lengths 22.5 cm and 47.8 cm. One angle measures 116°. What is the length of the shorter diagonal?