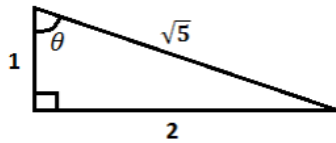**State the value of the hypotenuse, opposite and adjacent sides of angle θ of the given triangle:**

1. a) hypotenuse = _____

   b) opposite side = _____
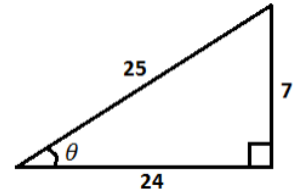
   c) adjacent side = _____

2. a) hypotenuse = _____

   b) opposite side = _____
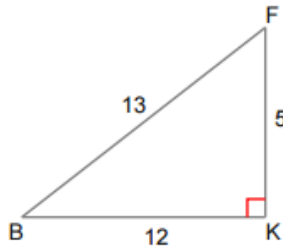
   c) adjacent side = _____

Write each ratio.

3. $sinB =$ _____ $sinF =$ _____
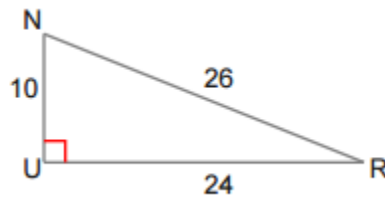
   $cosB =$ _____ $cosF =$ _____

   $tanB =$ _____ $tanF =$ _____

4. $sinN =$ _____ $sinR =$ _____

   $cosN =$ _____ $cosR =$ _____

   $tanN =$ _____ $tanR =$ _____

Find the following trig ratios by using your calculator. Round to the nearest hundredth.

5. sin(25°) =   6. cos(65°) =   7. sin(70°) =   8. cos(20°) =

9. sin(13°) =   10. cos(77°) =   11. sin(67°) =   12. cos(23°) =

13. How do the angles in 5 & 6, 7 & 8, 9 & 10, and 11 & 12 relate?
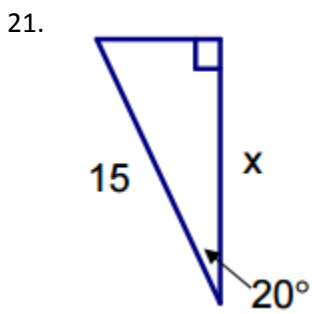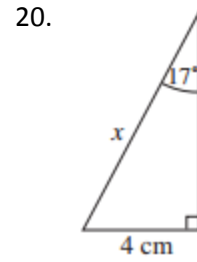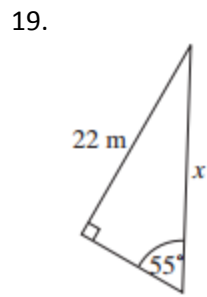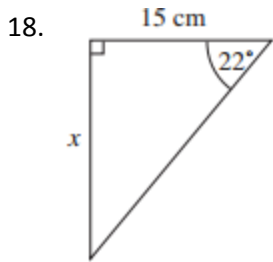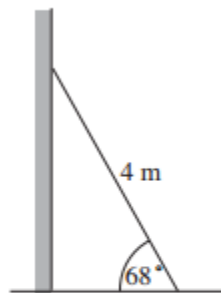
14. What did you notice about the value of each trig function of the angles in 5 & 6, 7 & 8, 9 & 10, and 11 & 12 relate?

Find the value of x to the nearest tenth.

15.

8 cm

50°

x

16.

x   12 cm

80°

17.

25°

11 cm

x

18.

15 cm

22°

x

19.

22 m

x

55°

20.

17°

x

4 cm

21.

15

x

20°

22.

x 55°

9

23.

33°   x

6
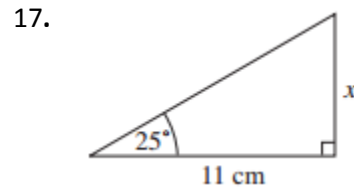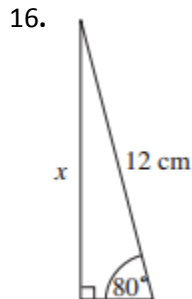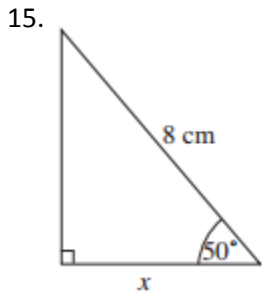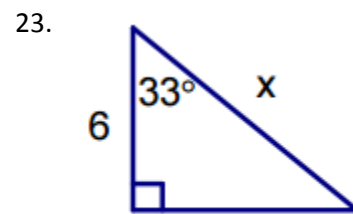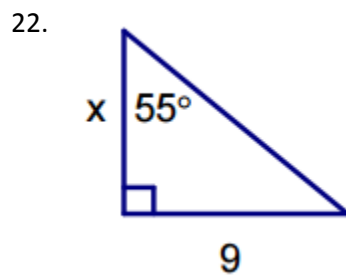
24. A ladder leans against a wall as shown in the diagram.

4 m

68°

(a)   How far is the top of the ladder from the ground?

(b)   How far is the bottom of the ladder from the wall?