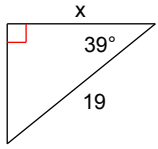


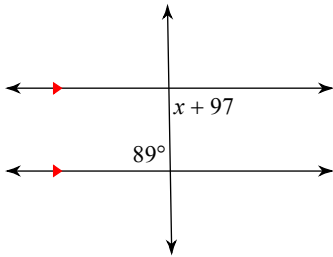
**Find the missing side. Round to the nearest tenth.**

1)



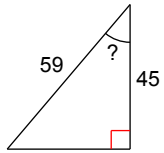
**Solve for  $x$ .**

2)

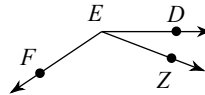


**Find the measure of the indicated angle to the nearest degree.**

3)

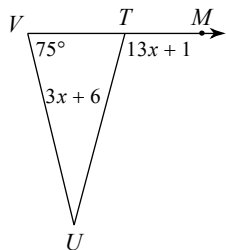


4)  $m\angle DEF = 146^\circ$  and  $m\angle ZEF = 125^\circ$ .  
Find  $m\angle DEZ$ .



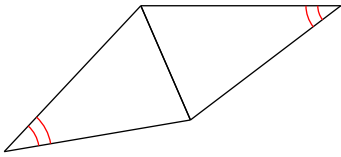
**Solve for  $x$ .**

5)

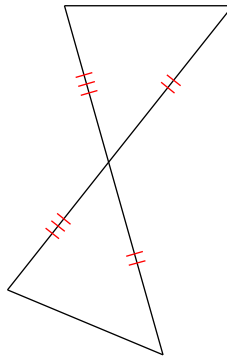


State if the two triangles are congruent. If they are, state how you know. (SSS, SAS, AAS, ASA)

6)

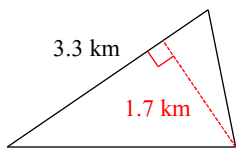


7)



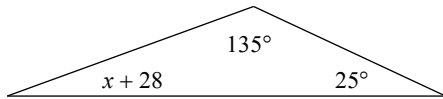
Find the area of each.

8)



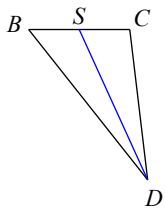
Solve for  $x$ .

9)



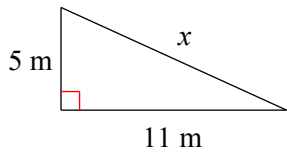
Each figure shows a triangle with one or more of its medians.

10) Find  $x$  if  $CB = x - 1$  and  $SB = 2x - 5$



**Find the missing side of each triangle. Leave your answers in simplest radical form.**

11)

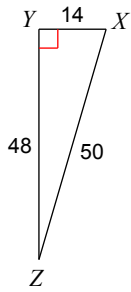


**Find the midpoint of the line segment with the given endpoints.**

12)  $(8, -9)$ ,  $(-5, -1)$

**Find the value of each trigonometric ratio.**

13)  $\cos X$



**Find the distance between each pair of points.**

14)  $(4, 1)$ ,  $(6, -8)$

**Write the slope-intercept form of the equation of the line through the given points.**

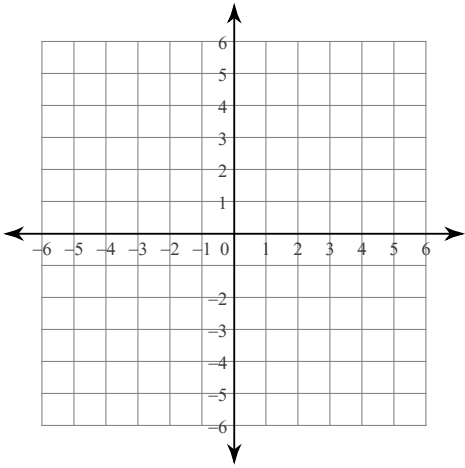
15) through:  $(-2, 1)$  and  $(4, 2)$

**Write the slope-intercept form of the equation of the line described.**

16) through:  $(-1, 5)$ , parallel to  $y = -4x + 4$

Sketch the graph of each line.

17)  $x + y = 3$

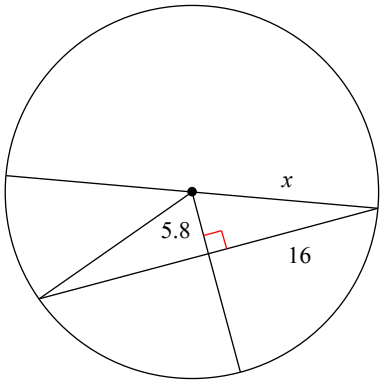


Write the slope-intercept form of the equation of the line described.

18) through:  $(4, 2)$ , perp. to  $y = 5$

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

19)

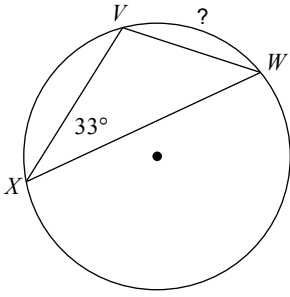


Use the information provided to write the equation of each circle.

20) Center:  $(-9, 5)$   
Radius: 3

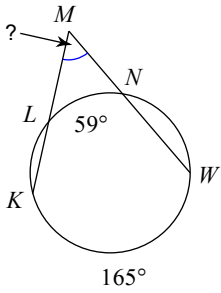
Find the measure of the arc or angle indicated.

21)



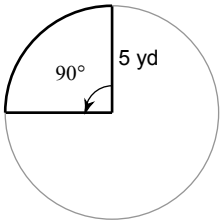
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

22)



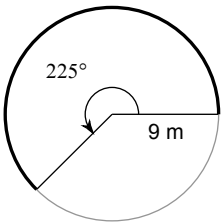
Find the area of each sector.

23)



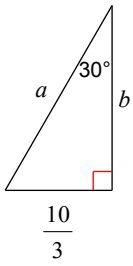
Find the length of each arc. Round your answers to the nearest tenth.

24)

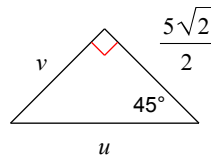


Find the missing side lengths. Leave your answers as radicals in simplest form.

25)

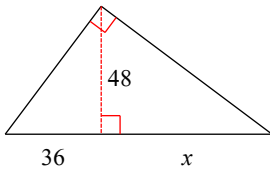


26)



Find the missing length indicated. Leave your answer in simplest radical form.

27)

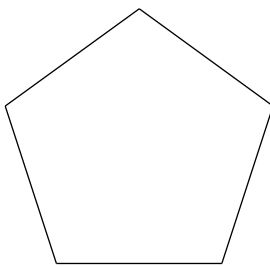


State if the three numbers can be the measures of the sides of a triangle.

28) 4, 8, 9

Find the area of each figure. Round your answer to the nearest tenth.

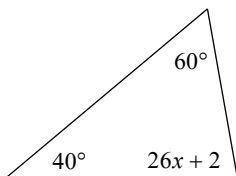
29)



Perimeter = 10 m

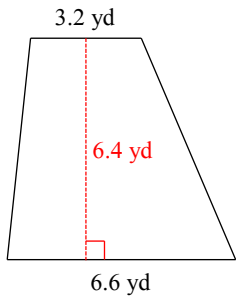
Solve for  $x$ .

30)



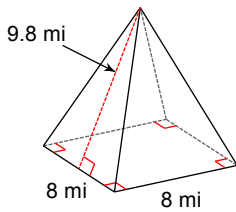
Find the area of each.

31)



Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

32)

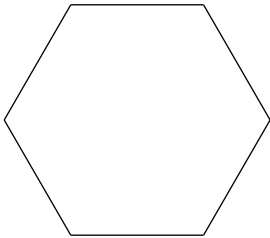


Solve each proportion.

33)  $\frac{n}{3} = \frac{10}{7}$

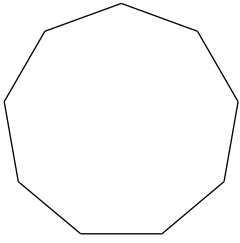
Find the measure of one interior angle in each polygon. Round your answer to the nearest tenth if necessary.

34)



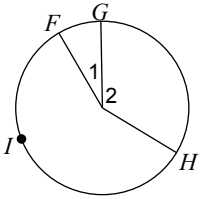
Find the interior angle sum for each polygon. Round your answer to the nearest tenth if necessary.

35)



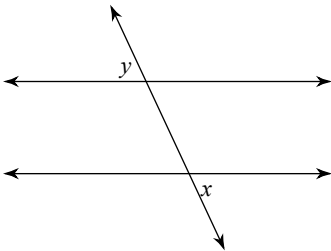
If an angle is given, name the arc it makes. If an arc is given, name its central angle.

36)  $\angle 2$

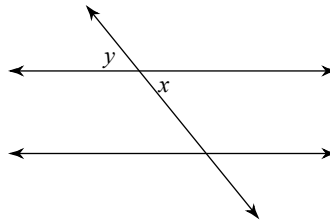


Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

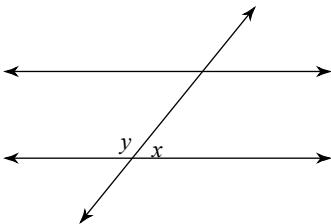
37)



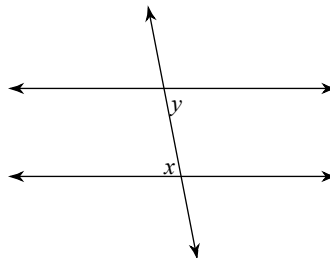
38)



39)



40)





## Answers to

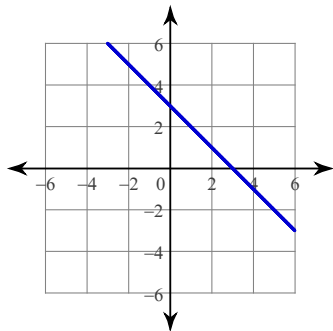
1) 14.8

5) 8

9) -8

13)  $\frac{7}{25}$

17)



20)  $(x + 9)^2 + (y - 5)^2 = 9$

23)  $\frac{25\pi}{4}$  yd<sup>2</sup>

27) 64

31) 31.36 yd<sup>2</sup>

35) 1260°

39) adjacent

2) -8

6) Not congruent

10) 3

14)  $\sqrt{85}$

18)  $x = 4$

21) 66°

24) 35.3 m

28) Yes

32) 220.8 mi<sup>2</sup>

36)  $\widehat{GH}$

40) alternate interior

3) 40°

7) SAS

11)  $\sqrt{146}$  m

15)  $y = \frac{1}{6}x + \frac{4}{3}$

19) 17

22) 53°

25)  $a = \frac{20}{3}$ ,  $b = \frac{10\sqrt{3}}{3}$

29) 6.9 m<sup>2</sup>

33) {4.28}

37) alternate exterior

4) 21°

8) 2.805 km<sup>2</sup>

12)  $\left(1\frac{1}{2}, -5\right)$

16)  $y = -4x + 1$

26)  $u = 5$ ,  $v = \frac{5\sqrt{2}}{2}$

30) 3

34) 120°

38) vertical