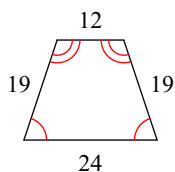
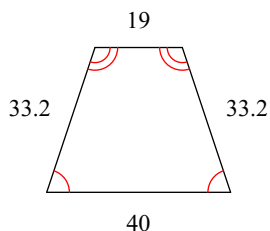


Solve each proportion.

1) $-\frac{7}{n-3} = \frac{10}{n+6}$

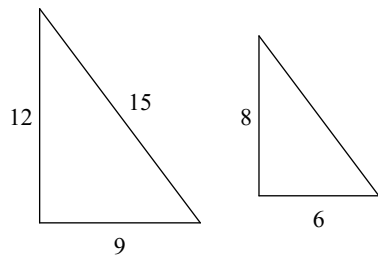
State if the polygons are similar.

2)

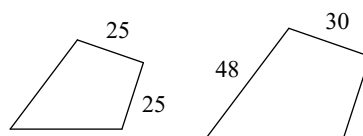


The polygons in each pair are similar. Find the scale factor of the smaller figure to the larger figure.

3)

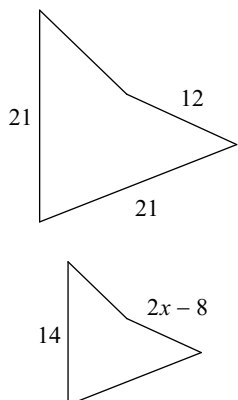


4)

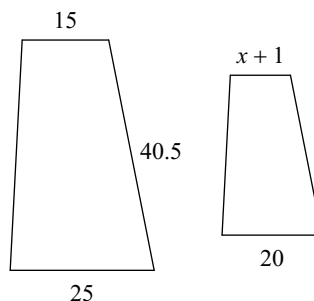


Solve for x . The polygons in each pair are similar.

5)

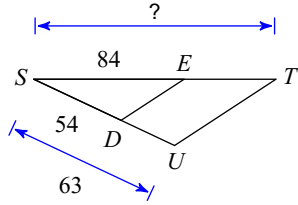


6)

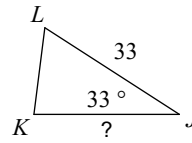
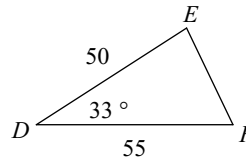


Find the missing length. The triangles in each pair are similar.

7)

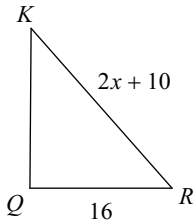
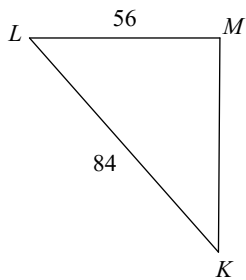


8) $\triangle DEF \sim \triangle JKL$

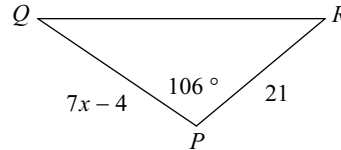
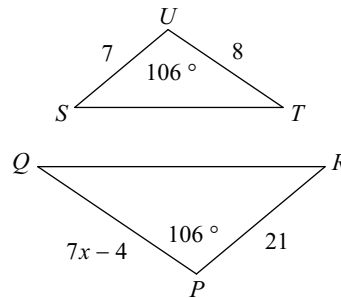


Solve for x . The triangles in each pair are similar.

9) $\triangle KLM \sim \triangle KRQ$

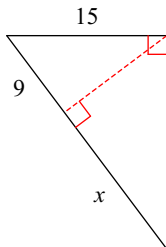


10) $\triangle PQR \sim \triangle UTS$



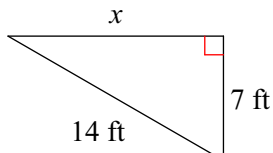
Find the missing length indicated. Leave your answer in simplest radical form.

11)



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

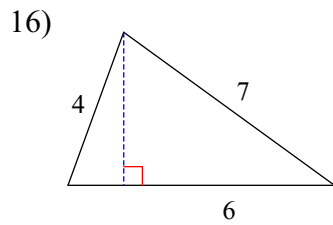
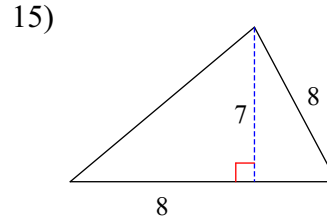
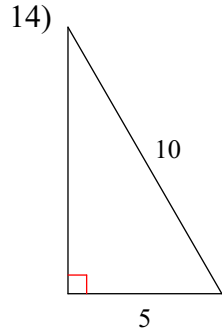
12)



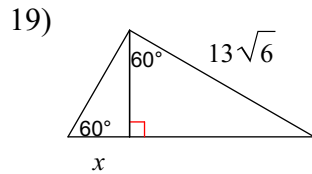
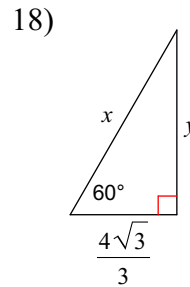
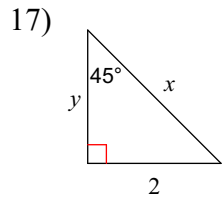
State if the three side lengths form an acute, obtuse, or right triangle.

13) $\sqrt{1793}$ m, 75 m, 87 m

Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.



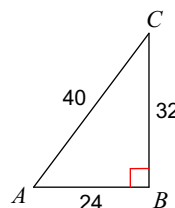
Find the missing side lengths. Leave your answers as radicals in simplest form.



Find the value of each trigonometric ratio to the nearest ten-thousandth.

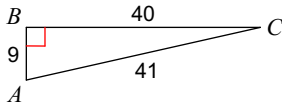
20) $\tan 18^\circ$

21) $\sin A$



Find the value of each trigonometric ratio.

22) $\cos C$

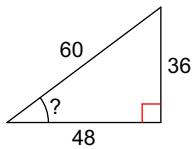


Find each angle measure to the nearest degree.

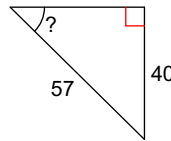
23) $\tan X = 2.2460$

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

24)

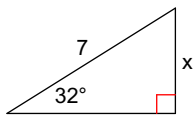


25)

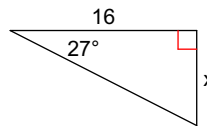


Find the missing side. Round to the nearest tenth.

26)

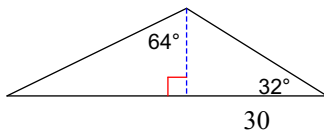


27)



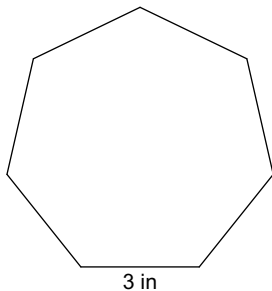
Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

28)



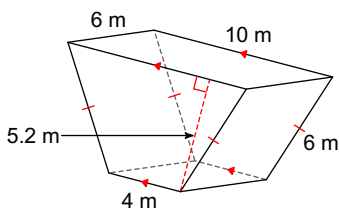
Find the area of each figure. Round your answer to the nearest tenth.

29)



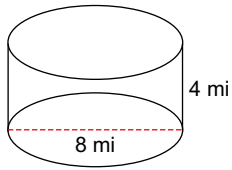
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

30)



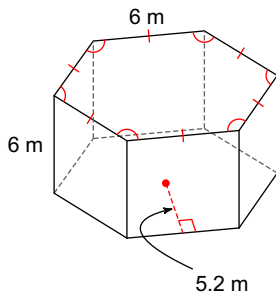
Find the lateral area of each figure. Round your answers to the nearest hundredth, if necessary.

31)



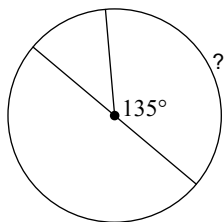
Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

32)

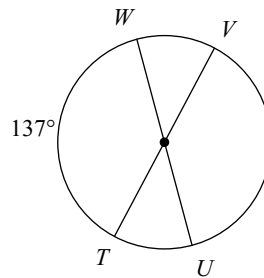


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

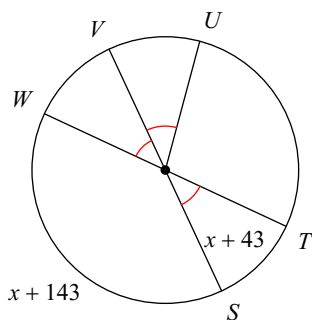
33)



34) $m\widehat{VUW}$

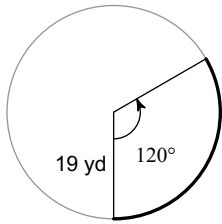


35) $m\widehat{UT}$



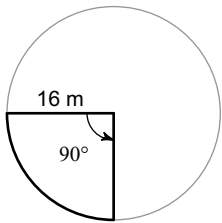
Find the length of each arc.

36)



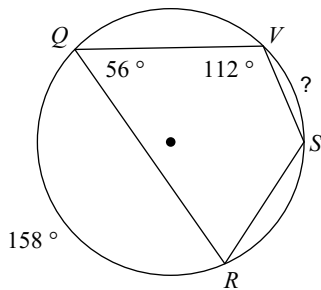
Find the area of each sector.

37)



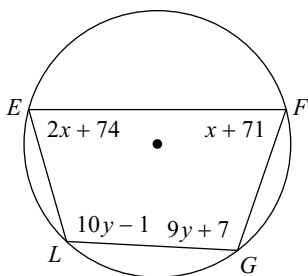
Find the measure of the arc or angle indicated.

38)



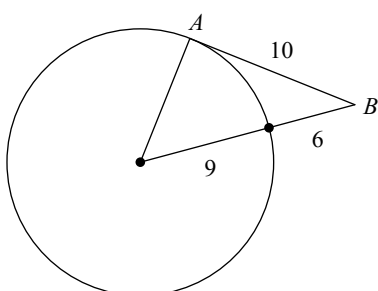
Solve for x and y .

39)



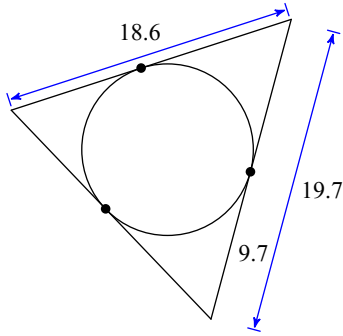
Determine if line AB is tangent to the circle.

40)



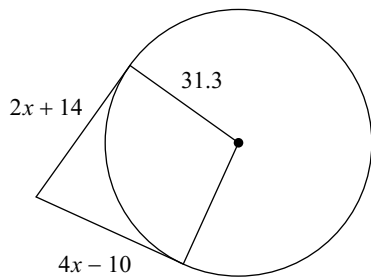
Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

41)



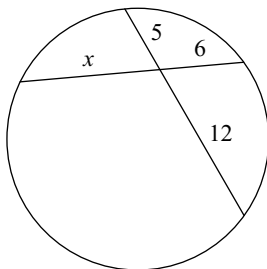
Solve for x . Assume that lines which appear to be tangent are tangent.

42)



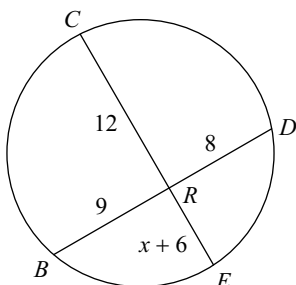
Solve for x . Assume that lines which appear tangent are tangent.

43)

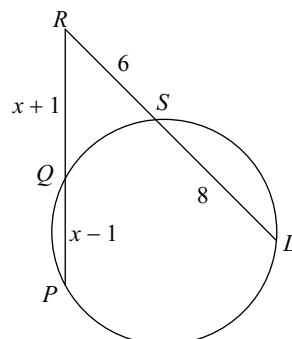


Find the measure of the line segment indicated. Assume that lines which appear tangent are tangent.

44) Find CE

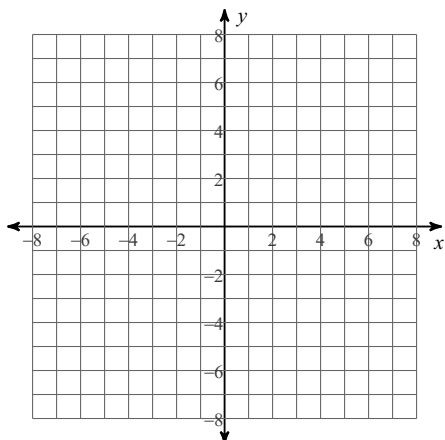


45) Find PR



Identify the center and radius of each. Then sketch the graph.

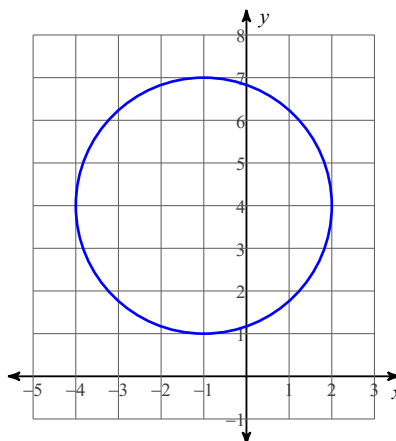
46) $(x + 1)^2 + (y - 2)^2 = 13$



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

47) Center: $(-10, 0)$
Radius: 8

48)



Represent the sample space using set notation.

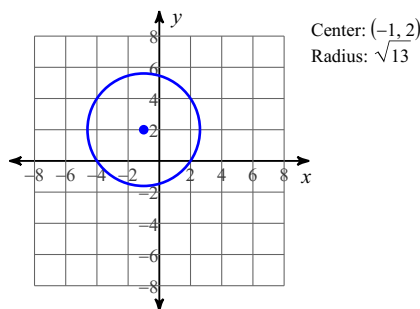
49) An ice cream stand offers single-scoop waffle-cones or bowls. Four flavors are available: strawberry, chocolate, vanilla, and mint chocolate chip.

Determine whether the scenario involves independent or dependent events. Then find the probability.

50) You roll a fair six-sided die five times. The die shows an even number the first three times and an odd number the remaining two times.

Answers to Geometry - PRACTICE Final Exam - Spring 2019

- | | | | |
|----------------------------|--------------------------------------|----------------------------|-----------------------------|
| 1) $\{-0.71\}$ | 2) not similar | 3) 2 : 3 | 4) 5 : 6 |
| 5) 8 | 6) 11 | 7) 98 | 8) 30 |
| 9) 7 | 10) 4 | 11) 16 | 12) $7\sqrt{3}$ ft |
| 13) Obtuse | 14) 21.8 | 15) 41.7 | 16) 13.9 |
| 17) $x = 2\sqrt{2}, y = 2$ | 18) $x = \frac{8\sqrt{3}}{3}, y = 4$ | 19) $\frac{13\sqrt{2}}{2}$ | 20) 0.3249 |
| 21) 0.8000 | 22) $\frac{40}{41}$ | 23) 66° | 24) 37° |
| 25) 45° | 26) 3.7 | 27) 8.2 | 28) 638.6 |
| 29) 32.7 in^2 | 30) 218.4 m^3 | 31) 100.53 mi^2 | 32) 403.2 m^2 |
| 33) 135° | 34) 317° | 35) 100° | 36) $\frac{38\pi}{3}$ yd |
| 37) $64\pi \text{ m}^2$ | 38) 46° | 39) $x = 0, y = 11$ | 40) Not tangent |
| 41) 56.6 | 42) 12 | 43) 10 | 44) 18 |
| 45) 12 | 46) | | 47) $(x + 10)^2 + y^2 = 64$ |



- 48) $(x + 1)^2 + (y - 4)^2 = 9$
- 49) $\{(W, S), (W, C), (W, V), (W, M), (B, S), (B, C), (B, V), (B, M)\}$
- 50) Independent; $\frac{1}{32} \approx 0.031$