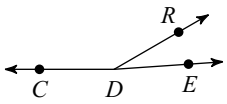
Geometry Name_____

Spring Break Review Topics WS for Semester 1 & 2 Date_____ Period____

Find the circumference of each circle.

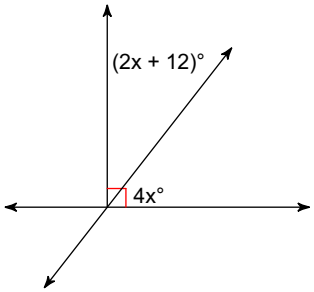
1) radius = 4 mi

2) $m\angle CDE = 176°$, $m\angle RDE = 2x + 26$, and $m\angle CDR = 2x + 150$. Find $m\angle CDR$.

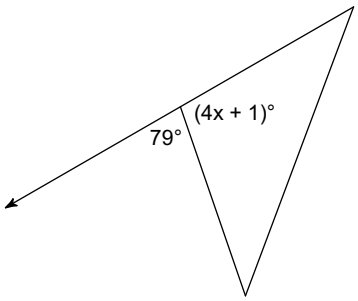


Find the value of x.

3)

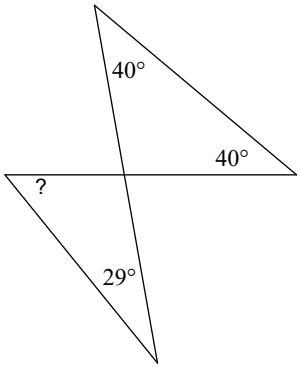


4)



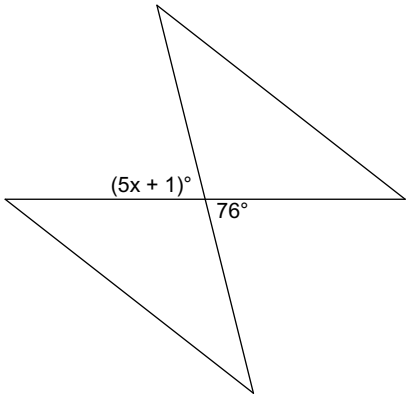
Find the measure of each angle indicated.

5)



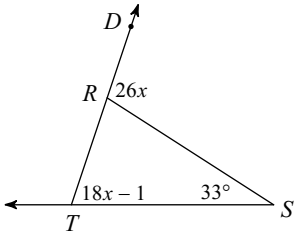
Find the value of x.

6)



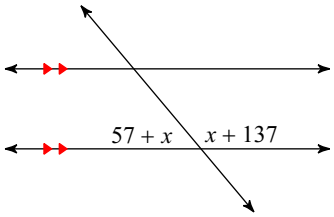
Find the measure of the angle indicated.

7) Find $m\angle DRS$.



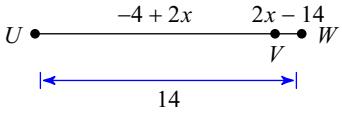
Solve for *x*.

8)



Find the length indicated.

9) Find UV

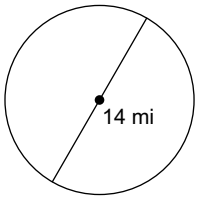


Find the midpoint of the line segment with the given endpoints.

11) $(-9, 9)$, $(-4, 2)$

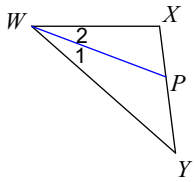
Find the area of each.

13)



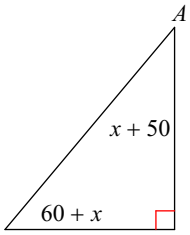
Each figure shows a triangle with one of its angle bisectors.

15) $m\angle 1 = 3x - 4$ and $m\angle YWX = 4x + 8$. Find x.



Find the measure of angle A.

17)

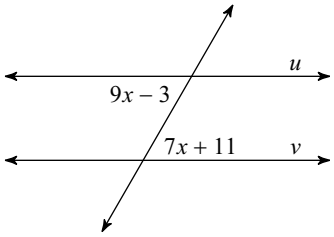


Find the distance between each pair of points.

10) $(6, 2)$, $(-5, 7)$

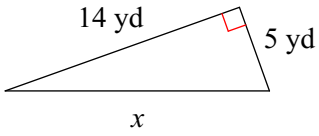
Find the value of x that makes lines u and v parallel.

12)



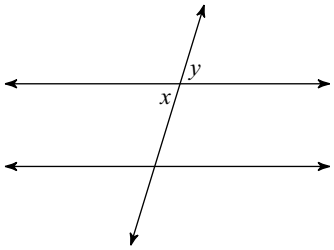
Find the missing side of each triangle. Leave your answers in simplest radical form.

14)

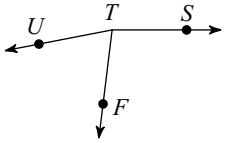


Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

16)

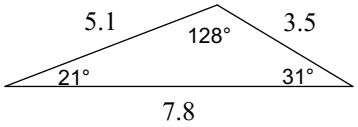


18) $m\angle FTU = 71x + 1$, $m\angle STF = -1 + 98x$, and $m\angle STU = 169°$. Find $m\angle STF$.

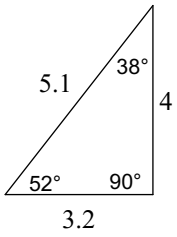


Classify each triangle by its angles and sides.

19)



20)

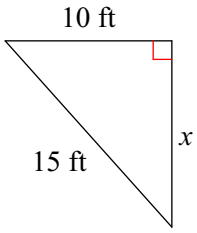


Points A, B, and C are collinear. Point B is between A and C. Find the length indicated.

21) Find BC if $AC = 16$, $BC = x - 3$, and $AB = 2x - 5$.

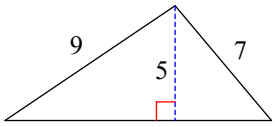
Find the missing side of each triangle. Leave your answers in simplest radical form.

22)



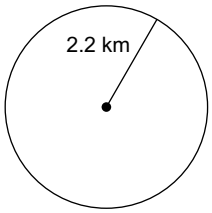
Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

23)



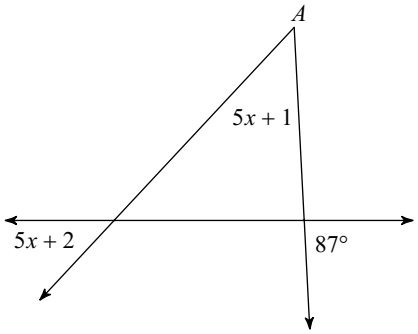
Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

24)



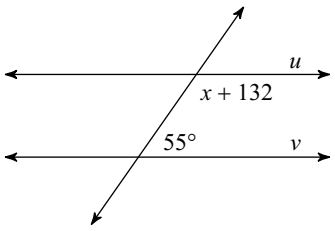
Find the measure of angle A.

25)



Find the value of x that makes lines u and v parallel.

26)

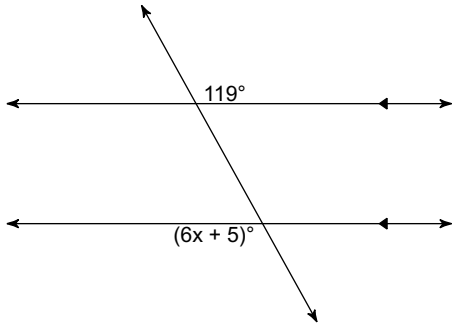


Find the other endpoint of the line segment with the given endpoint and midpoint.

27) Endpoint: $(-9, 3)$, midpoint: $(5, 7)$

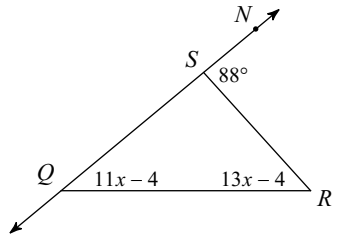
Find the value of x.

28)



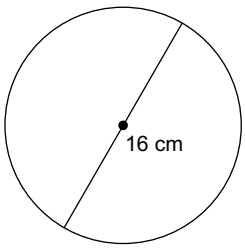
Find the measure of the angle indicated.

30) Find $m\angle R$.



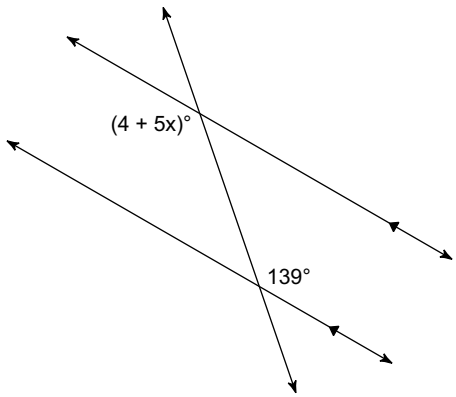
Find the area of each.

32)



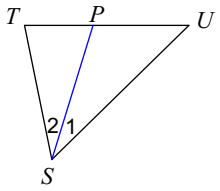
Find the value of x.

34)



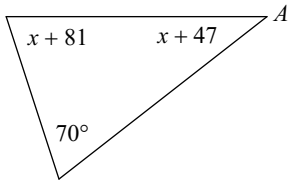
Each figure shows a triangle with one of its angle bisectors.

29) $m\angle 1 = 2x + 10$ and $m\angle 2 = 4x - 8$. Find $m\angle UST$.

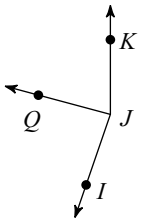


Find the measure of angle A.

31)

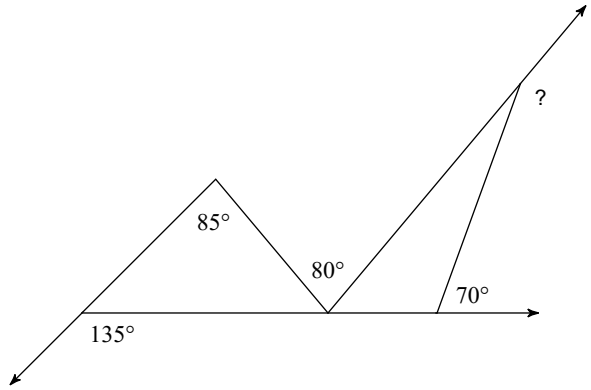


33) $m\angle IJK = 161°$, $m\angle IJQ = x + 94$, and $m\angle QJK = x + 83$. Find x.



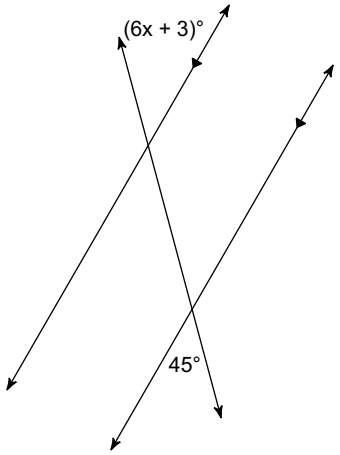
Find the measure of each angle indicated.

35)



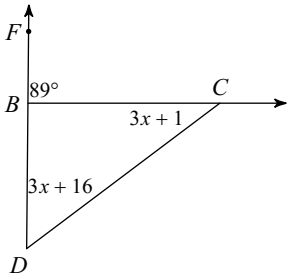
Find the value of x.

36)



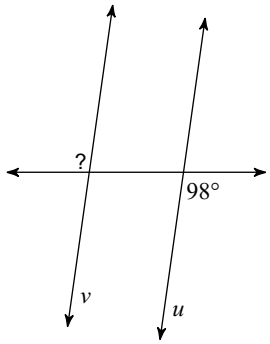
Find the measure of the angle indicated.

37) Find $m\angle D$.

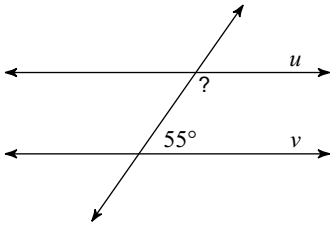


Find the measure of the indicated angle that makes lines u and v parallel.

38)



39)

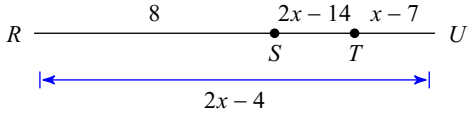


Find the distance between each pair of points.

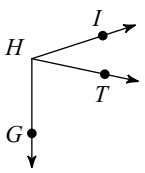
40) $(5, -6)$, $(-3, 3)$

Find the length indicated.

41) Find ST

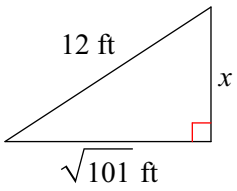


42) Find x if $m\angle IHG = 8x + 20$, $m\angle THG = 6x + 12$, and $m\angle IHT = 30°$.



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

43)

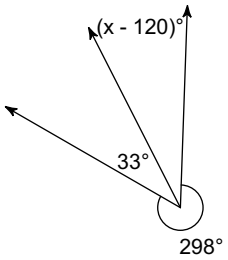


Find the other endpoint of the line segment with the given endpoint and midpoint.

45) Endpoint: $(3, 1)$, midpoint: $(-9, 5)$

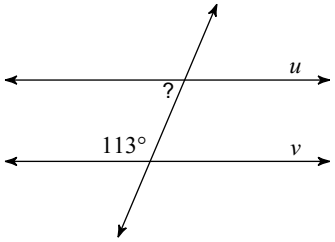
Find the value of x.

44)



Find the measure of the indicated angle that makes lines u and v parallel.

46)



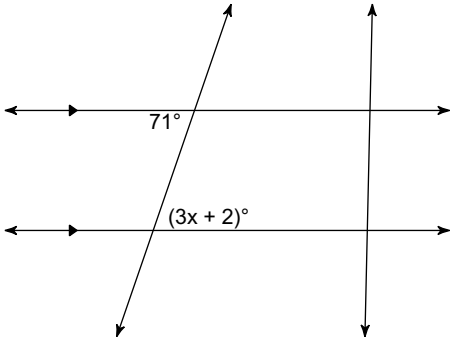
Find the circumference of each circle.

47) diameter = 8 m

48) diameter = 4 km

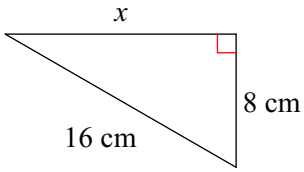
Find the value of x.

49)



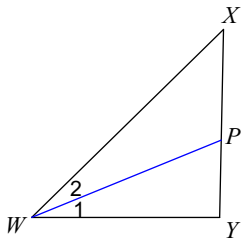
Find the missing side of each triangle. Leave your answers in simplest radical form.

50)



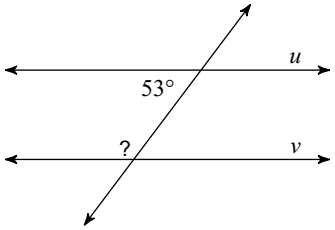
Each figure shows a triangle with one of its angle bisectors.

51) Find $m\angle 2$ if $m\angle 2 = 2x + 10$ and $m\angle YWX = 6x + 8$.



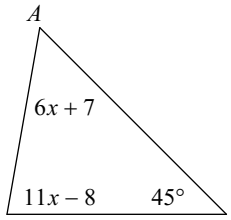
Find the measure of the indicated angle that makes lines u and v parallel.

52)



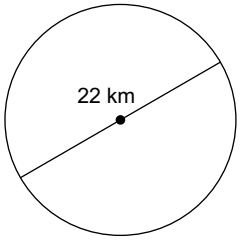
Find the measure of angle A.

53)



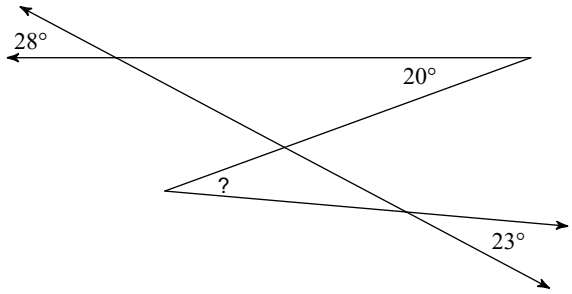
Find the area of each.

55)



Find the measure of each angle indicated.

57)

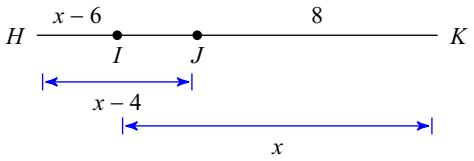


Find the distance between each pair of points.

59) $(-4, 1)$, $(-5, -2)$

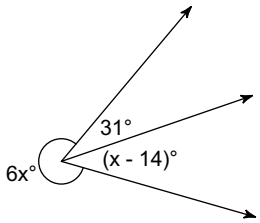
Find the length indicated.

54) Find *IK*



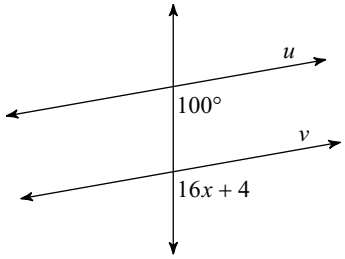
Find the value of x.

56)



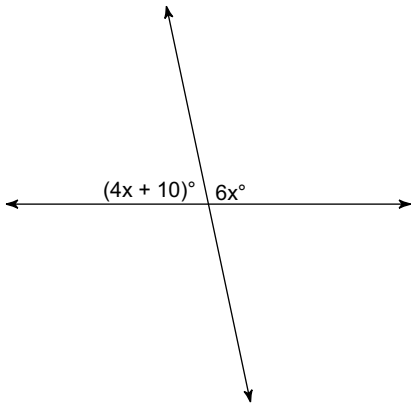
Find the value of *x* that makes lines u and v parallel.

58)



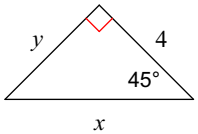
Find the value of x.

60)

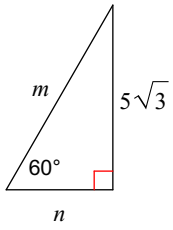


Find the missing side lengths. Leave your answers as radicals in simplest form.

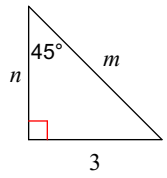
61)



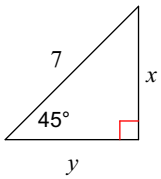
62)



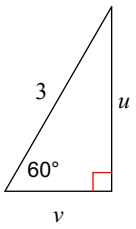
63)



64)



65)



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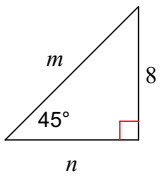

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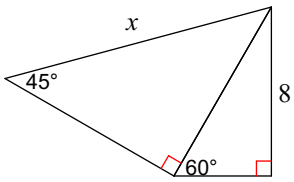
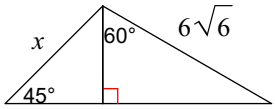
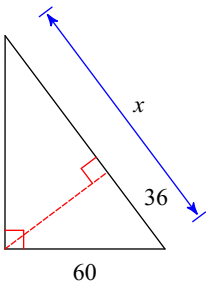


68)



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

69)



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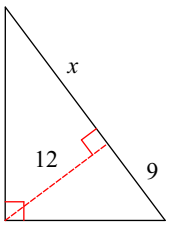

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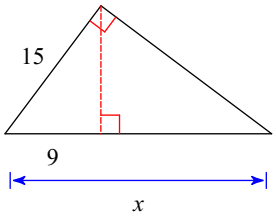
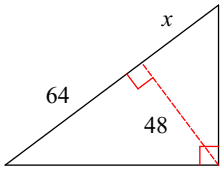
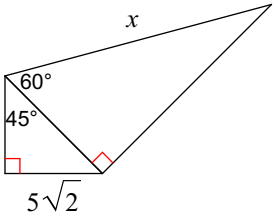


72)

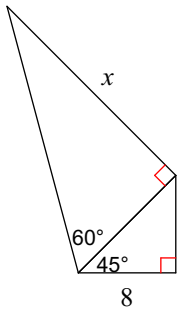


Find the missing side lengths. Leave your answers as radicals in simplest form.

73)

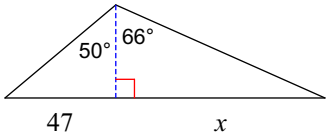


74)

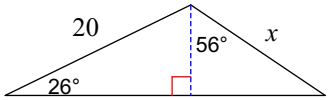


Find the length of the side labeled *x*. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

75)



76)



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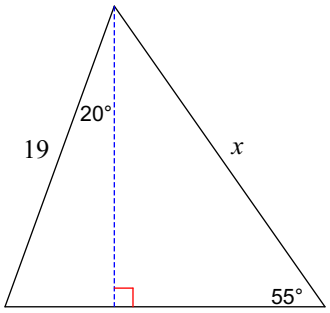
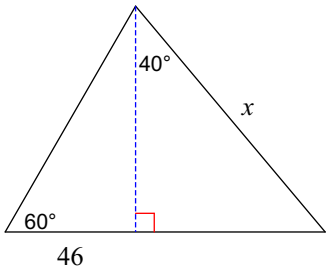
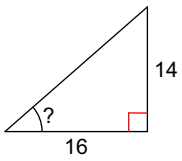


78)

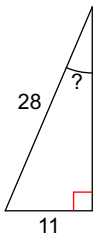


Find the measure of the indicated angle to the nearest degree (use the Trig Table).

79)



80)



Answers to Spring Break Review Topics WS for Semester 1 & 2

1) 8π mi
2) $150°$
3) 13
4) 25
5) $51°$
6) 15
7) $104°$
8) -7
9) 12
10) $\sqrt{146}$
11) $\left(-6\frac{1}{2}, 5\frac{1}{2}\right)$
12) 7
13) 49π mi²
14) $\sqrt{221}$ yd
15) 8
16) vertical
17) $40°$
18) $97°$
19) obtuse scalene
20) right scalene
21) 5
22) $5\sqrt{5}$ ft
23) 31
24) 13.8 km
25) $46°$
26) -7
27) $(19, 11)$
28) 19
29) $56°$
30) $48°$
31) $38°$
32) 64π cm²
33) -8
34) 27
35) $160°$
36) 7
37) $52°$
38) $98°$
39) $125°$
40) $\sqrt{145}$
41) 4
42) 11
43) $\sqrt{43}$ ft
44) 149
45) $(-21, 9)$
46) $67°$
47) 8π m
48) 4π km
49) 23
50) $8\sqrt{3}$ cm
51) $22°$
52) $127°$
53) $55°$
54) 10
55) 121π km²
56) 49
57) $25°$
58) 6
59) $\sqrt{10}$
60) 17
61) $x = 4\sqrt{2},\ y = 4$
62) $m = 10,\ n = 5$
63) $m = 3\sqrt{2},\ n = 3$
64) $x = \frac{7\sqrt{2}}{2},\ y = \frac{7\sqrt{2}}{2}$
65) $u = \frac{3\sqrt{3}}{2},\ v = \frac{3}{2}$
66) $m = 8\sqrt{2},\ n = 8$
67) $\frac{16\sqrt{6}}{3}$
68) $6\sqrt{3}$
69) 100
70) 16
71) 25
72) 36
73) 20
74) $8\sqrt{6}$
75) 88.5
76) 15.7
77) 21.9
78) 104
79) $41°$
80) $23°$