

Week 6 Practice - Ref. Ch. 12-7 & Page 37.

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

1) $(x - 3)^2 + y^2 = 14$

3) $(x - 1)^2 + (y + 2)^2 = 16$

5) $(x - 2)^2 + (y + 1)^2 = 4$

7) $(x - 3)^2 + (y - 2)^2 = 9$

9) $(x - 3)^2 + (y - 3)^2 = 13$

2) $(x - 1)^2 + (y - 2)^2 = 9$

4) $(x - 3)^2 + (y + 4)^2 = 7$

6) $(x - 2)^2 + (y - 1)^2 = 16$

8) $(x - 1)^2 + (y - 4)^2 = 2$

10) $(x - 2)^2 + (y + 2)^2 = 16$

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

11) Center: $(5, -14)$

Radius: $\sqrt{2}$

13) Center: $(-\frac{5}{2}, \frac{21}{2})$

Radius: 3

15) Center: $(3, \sqrt{23})$

Radius: 6

17) Center: $(7, 6)$

Radius: 12

19) Center: $(-5, 0)$

Radius: 9

21) Center: $(-3, -9)$

Point on Circle: $(6, -10)$

23) Center: $(0, 2)$

Point on Circle: $(3, -6)$

25) Center: $(-5, -4)$

Point on Circle: $(-9, -10)$

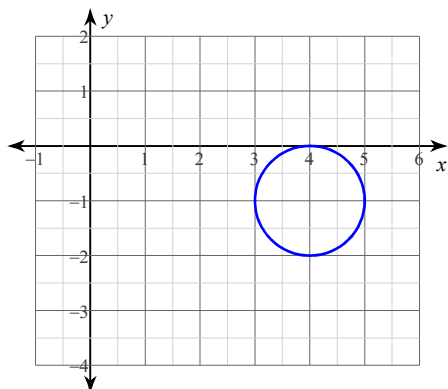
27) Center: $(-3, -12)$

Point on Circle: $(4, -12)$

29) Center: $(2, 17)$

Point on Circle: $(4, 17)$

31)



12) Center: $(-16, -7)$

Radius: 1

14) Center: $(-6, 11)$

Radius: $3\sqrt{2}$

16) Center: $(\frac{1}{2}, -\frac{17}{2})$

Radius: $\sqrt{19}$

18) Center: $(-5, 1)$

Radius: 6

20) Center: $(1, 10)$

Radius: 4

22) Center: $(-2, 3)$

Point on Circle: $(-12, 9)$

24) Center: $(-7, 5)$

Point on Circle: $(-13, -3)$

26) Center: $(-6, -15)$

Point on Circle: $(-7, -15)$

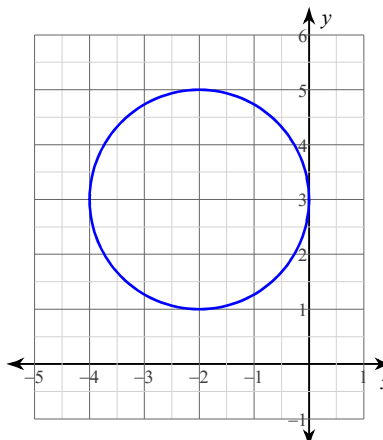
28) Center: $(-1, -10)$

Point on Circle: $(-2, -15)$

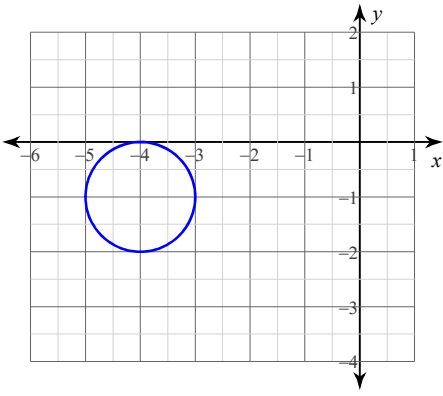
30) Center: $(-4, 11)$

Point on Circle: $(2, 10)$

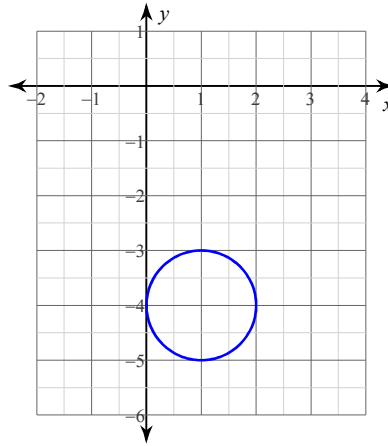
32)



33)



34)



Find the circumference of each circle. Use 3.1416 for the value of π . Round your answer to the nearest tenth.

35) radius = 8 cm

36) radius = 6 cm

37) radius = 12 mi

38) radius = 9.5 mi

39) radius = 11 cm

40) radius = 9.3 yd

41) radius = 3.4 yd

42) radius = 7 cm

Find the area of each. Use 3.1416 for the value of π . Round your answer to the nearest tenth.

43) radius = 7.7 yd

44) radius = 4.1 in

45) radius = 7.5 yd

46) radius = 5.8 in

47) radius = 5.9 ft

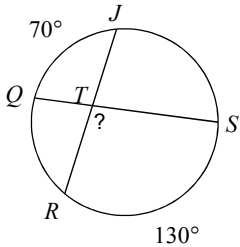
48) radius = 11.8 ft

49) radius = 4 km

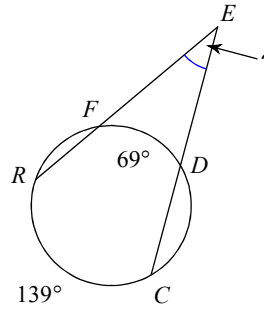
50) radius = 10 km

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

51)



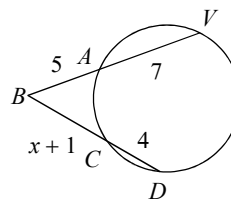
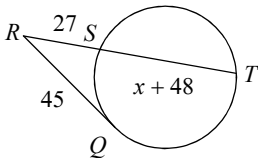
52)



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

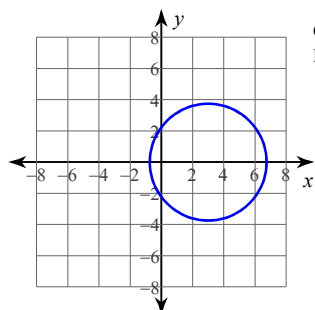
53) Find RT

54) Find DB



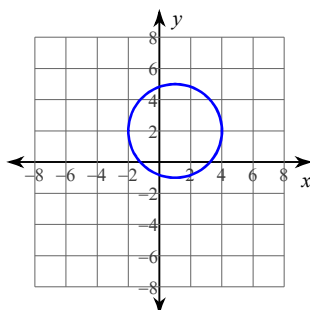
Answers to Week 6 Practice - Ref. Ch. 12-7 & Page 37. (ID: 1)

1)



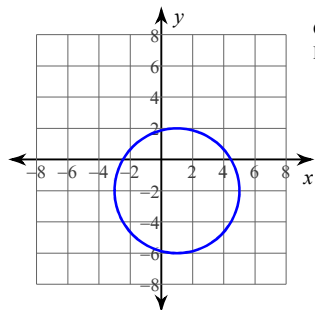
Center: $(3, 0)$
Radius: $\sqrt{14}$

2)



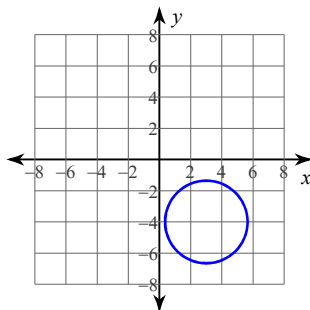
Center: $(1, 2)$
Radius: 3

3)



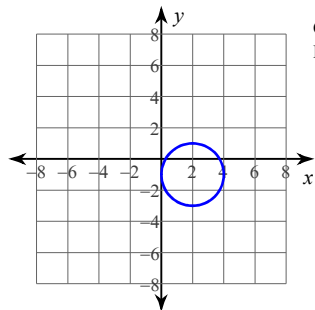
Center: $(1, -2)$
Radius: 4

4)



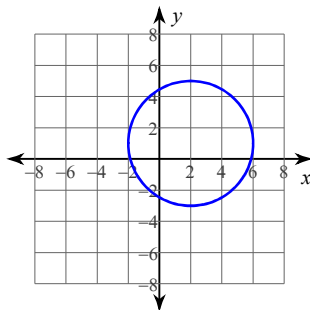
Center: $(3, -4)$
Radius: $\sqrt{7}$

5)



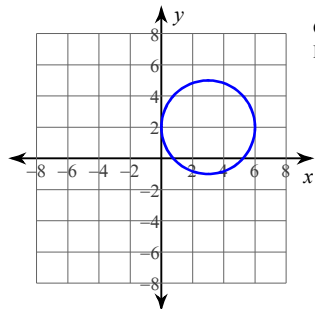
Center: $(2, -1)$
Radius: 2

6)



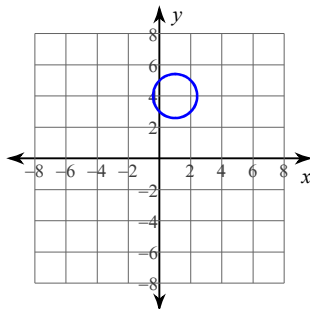
Center: $(2, 1)$
Radius: 4

7)



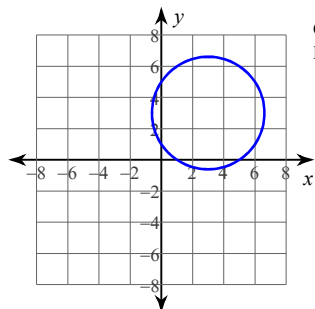
Center: $(3, 2)$
Radius: 3

8)



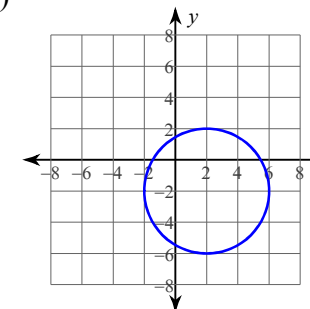
Center: $(1, 4)$
Radius: $\sqrt{2}$

9)



Center: $(3, 3)$
Radius: $\sqrt{13}$

10)



Center: $(2, -2)$
Radius: 4

11) $(x - 5)^2 + (y + 14)^2 = 2$

12) $(x + 16)^2 + (y + 7)^2 = 1$

13) $\left(x + \frac{5}{2}\right)^2 + \left(y - \frac{21}{2}\right)^2 = 9$

14) $(x + 6)^2 + (y - 11)^2 = 18$

15) $(x - 3)^2 + (y - \sqrt{23})^2 = 36$

16) $\left(x - \frac{1}{2}\right)^2 + \left(y + \frac{17}{2}\right)^2 = 19$

- 17) $(x-7)^2 + (y-6)^2 = 144$ 18) $(x+5)^2 + (y-1)^2 = 36$ 19) $(x+5)^2 + y^2 = 81$
 20) $(x-1)^2 + (y-10)^2 = 16$ 21) $(x+3)^2 + (y+9)^2 = 82$ 22) $(x+2)^2 + (y-3)^2 = 136$
 23) $x^2 + (y-2)^2 = 73$ 24) $(x+7)^2 + (y-5)^2 = 100$ 25) $(x+5)^2 + (y+4)^2 = 52$
 26) $(x+6)^2 + (y+15)^2 = 1$ 27) $(x+3)^2 + (y+12)^2 = 49$ 28) $(x+1)^2 + (y+10)^2 = 26$
 29) $(x-2)^2 + (y-17)^2 = 4$ 30) $(x+4)^2 + (y-11)^2 = 37$ 31) $(x-4)^2 + (y+1)^2 = 1$
 32) $(x+2)^2 + (y-3)^2 = 4$ 33) $(x+4)^2 + (y+1)^2 = 1$ 34) $(x-1)^2 + (y+4)^2 = 1$
 35) 50.2 cm 36) 37.7 cm 37) 75.4 mi 38) 59.7 mi
 39) 69.1 cm 40) 58.4 yd 41) 21.4 yd 42) 44 cm
 43) 186.2 yd² 44) 52.8 in² 45) 176.6 yd² 46) 105.6 in²
 47) 109.3 ft² 48) 437.2 ft² 49) 50.2 km² 50) 314 km²
 51) 100° 52) 35° 53) 75 54) 10