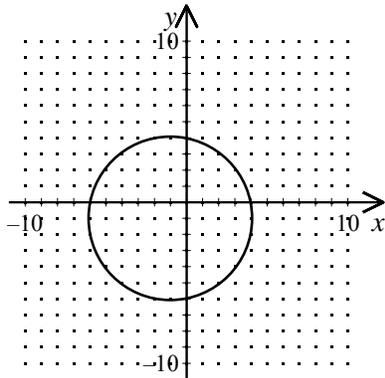


NAME: \_\_\_\_\_

1. Find the circumference of the circle.



2. Find the circumference to the nearest tenth of a circle with the points  $(4, 6)$  and  $(-2, 9)$  as the endpoints of a diameter.
- [A] 25.32                      [B] 21.1  
[C] 15.825                      [D] 27.43
3. Find the coordinates of the center and the radius of the circle with diameter  $\overline{CD}$ .  
 $C(-2, 1)$ ,  $D(6, 7)$
- [A]  $(2, 4)$ , 5                      [B]  $(-4, -3)$ ,  $3\sqrt{2}$   
[C]  $(2, 4)$ ,  $3\sqrt{3}$                       [D]  $(-4, -3)$ ,  $2\sqrt{5}$
4. Find the coordinates of the center and the radius of the circle with diameter  $\overline{CD}$ .  
 $C(-6, 2)$ ,  $D(8, 6)$
- [A]  $(1, 4)$ ,  $\sqrt{55}$                       [B]  $(-7, -2)$ ,  $\sqrt{15}$   
[C]  $(-7, -2)$ ,  $\sqrt{17}$                       [D]  $(1, 4)$ ,  $\sqrt{53}$
5. Find the circumference of a circle to the nearest tenth with the points  $(-3, 12)$  and  $(5, -11)$  as the endpoints of a diameter.
6. Find the circumference of a circle to the nearest tenth with the points  $(-10, -10)$  and  $(-3, 8)$  as the endpoints of a diameter.
7. Find the center of a circle if one chord has endpoints  $(-4, 13)$  and  $(0, 19)$  and another has endpoints  $(8, 5)$  and  $(8, 19)$ .
8. Find the center of a circle if one chord has endpoints  $(7, -12)$  and  $(11, -6)$  and another has endpoints  $(19, -20)$  and  $(19, -6)$ .
9. A search and rescue team is searching for a child last seen at a grocery store at 2 P.M. It is estimated that she can walk 2 mi/h. It is now 4:30 P.M. Draw a picture of the search area on coordinate axes and find the area they need to search.
10. A circular dartboard drawn on a coordinate system consists of three concentric circles centered at  $(2, -1)$ . The center circle and outer ring are shaded and the middle one is white. If the first circle contains  $(2, 2)$ , the second contains  $(2, 5)$ , and the third contains  $(2, 8)$ , what is the probability that a dart thrown at the dartboard by a blindfolded person will hit the white ring if it hits the dartboard?

[1] 31.4 \_\_\_\_\_

[2] B \_\_\_\_\_

[3] A \_\_\_\_\_

[4] D \_\_\_\_\_

[5] 76.5 \_\_\_\_\_

[6] 60.7 \_\_\_\_\_

[7] (4, 12) \_\_\_\_\_

[8] (15, -13) \_\_\_\_\_

The search area will be a circle with center (0, 0) and radius 5; the area is  $25\pi$  or about

[9] 78.5 mi<sup>2</sup>. \_\_\_\_\_

[10]  $\frac{1}{3}$  \_\_\_\_\_