## Arc Length-Sector Area Name:

$\qquad$

Wells Worksheet (W2)

1. Find the length of arc $A B$.


Arc: $\qquad$
3. The length of arc $E F$ is $5 \pi$ in. Find the length of the radius.


Radius:

| Date: | Block: |
| :--- | :--- |

2. The diameter is 24 cm . Find the length of arc $C D$.


Arc: $\qquad$
4. Find the length of arc $X Y$.


Arc: $\qquad$
5. A circle has an arc whose measure is $80^{\circ}$ and whose length is $88 \pi$. What is the diameter of the circle?
6. A circle has a circumference whose length is $25 \pi$. Find the length of an arc whose central angle is $90^{\circ}$.
7. Find the measure of the central angle of an arc if its length is $14 \pi$ and the radius is 18 .

## Arc Length-Sector Area Name:

8. Calculate the sector area:
a.

b.

c.

9. The area of a circle is $225 \pi$ square inches. Find the area of the sector whose central angle is $45^{\circ}$.
10. The central angle of a sector is $60^{\circ}$ and the area of the circle is $144 \pi$. What is the area of the sector?
11. A circle has a radius of 12. Find the area of the sector whose central angle is $120^{\circ}$.
12. Find the radius of a circle which has a sector area of $9 \pi$ whose central angle is $90^{\circ}$.
13. The central angle of a sector is $72^{\circ}$ and the sector has an area of $5 \pi$. Find the radius.
14. Find the measure of the central angle of a sector if its area is $5 \pi$ and the radius is 6 .
