$\qquad$ Date $\qquad$

1. Find the measure of each arc length shown.
a.

2. Find the sector area of the sector formed by $\widehat{O N}$

b.

3. Find the area of each sector shown.
a.

c.

b.

4. If the central angle of an arc is $60^{\circ}$ and the arc length created is $25 \pi$, what is the radius of the circle?
5. If a circle has a central angle of $120^{\circ}$ and a sector area of $49 \pi$, what would the radius of the circle be?
6. If the arc length of a circle is $10 \pi$ and the circumference is $50 \pi$, what is the measure central angle that formed the arc?
7. If the area of a circle is $36 \pi$ and the area subtended by the central angle is $12 \pi$, what is the measure central angle that formed the arc?
