

1. What is the circumference of the above circle? What is the area?
2. What is the area of a circle with radius 4 ?
3. What is the area of a circle with diameter 8 ?
4. What is the radius of a circle with area $9 \pi$ ?

5 . What is the diameter of a circle with area $9 \pi$ ?
6 . What is the circumference of a circle with area $25 \pi$ ?

## Practice Drill 27-Circles

1. Circumference $=10 \pi$. Area $=25 \pi$.

Plug the radius into the circumference formula for a circle: $C=2 \pi r=2 \pi(5)=10 \pi$. Plug the radius into the area formula for a circle: $A=\pi r^{2}=\pi(5)^{2}=25 \pi$.
2. $16 \pi$

Plug the radius into the area formula for a circle: $A=\pi r^{2}=\pi(4)^{2}=16 \pi$.
3. $16 \pi$

Since $d=2 r$, the radius is $4(8=2 r)$. Plug the radius into the area formula for a circle: $A=$ $\pi r^{2}=\pi(4)^{2}=16 \pi$. Note: this is really the same circle as the previous question.
4.

3

Remember, you can find the radius from a circle's area by getting rid of $\pi$ and taking the square root of 9 .
5. 6

Find the radius from a circle's area by getting rid of $\pi$ and taking the square root of 9 . Then multiply the radius by 2 to find the diameter.
6. $10 \pi$

Find the radius from a circle's area by getting rid of $\pi$ and taking the square root of 25 . Then, plug the radius into the circumference formula for a circle: $C=2 \pi r=2 \pi(5)=10 \pi$.

