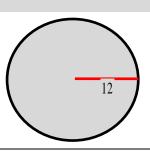
Find the area of the following circle.

1.

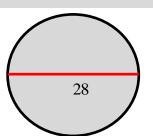


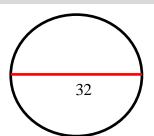
 $A = \pi r^2$



$$A=\frac{\pi d^2}{4}$$

3.





Name:	Period:	Date:

Complete the table below. Find the area or the radius of the following circles.

	Radius	Area
5.	5	
6.		9π
7.	16m	
8.		289πcm²
9.	25cm	

Complete the table below. Find the area or the diameter of the following circles.

	Diameter	Area
10.	18	
11.		54π
12.	26m	
13.		250πcm²
14.	30cm	

Name:	Period:	Date:

Solve Problem involving circles.

15. The area of a circle is 121π . Find its diameter.

16. The diameter of a circle is 22 cm. Find the area of the circle.

17. The radius of a circle is 20m. Find the area of the circle.

18. The length of the longest leg of a clock is 4 inches. Find the area of the clock.

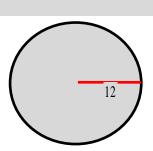
19. The area of one face of a coin is 113.09mm². Find the diameter of the coin.

20. The diameter of a plate is 8 inches. Find the area of the plate.

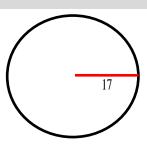
Answer:

Find the area of the following circle.

1.



 $A=\pi r^2$



Solution:

$$A = \pi r^2$$

$$A=\pi 12^2$$

$$A=144\pi$$

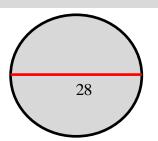
Solution:

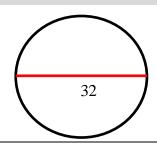
$$A = \pi r^2$$

$$A=\pi 17^2$$

$$A=289\pi$$

3.





Solution:

$$A = \frac{\pi d^2}{4}$$

$$A=\frac{\pi^28^2}{2}$$

$$A=\frac{784\pi}{1}$$

$$A = 196\pi$$

Solution:

$$\int_{A} d^2$$

$$\pi$$
32

$$A = \frac{}{4}$$

$$A = \frac{1024\pi}{4}$$

$$A=256\pi$$

Name: ______ Period: _____ Date: _____

Area of Circles Assignment

Complete the table below. Find the area or the radius of the following circles.

	Radius	Area
5.	5	<mark>25π</mark>
6.	3	9π
7.	16m	256π
8.	17m	289πcm²
9.	25cm	<mark>625π</mark>

Complete the table below. Find the area or the diameter of the following circles.

	Diameter	Area
10.	18	<mark>81π</mark>
11.	<mark>14.7</mark>	54π
12.	26m	<mark>169πm²</mark>
13.	131.62cm	250πcm²
14.	30cm	<mark>225πcm²</mark>

Solve Problem involving circles.

15. The area of a circle is 121π . Find its diameter.

$$A=\frac{\pi d^2}{4}$$

$$124\pi = \frac{\pi d^2}{4}$$

$$124(4)\pi=\pi d^2$$

$$d^2=496$$

$$d=22.27$$

16. The diameter of a circle is 22 cm. Find the area of the circle.

Solution:

$$A = \frac{\pi d^2}{4}$$
$$A = \frac{\pi 22^2}{4}$$

$$A = \frac{484\pi}{4}$$

The radius of a circle is 20m. Find the area of the circle. **17**.

$$A = \pi r^2$$

$$A=\pi 20^2$$

$$A = 400\pi m^2 \text{ or } 1256.64 \text{ } m^2$$

18. The length of the longest leg of a clock is 4 inches. Find the area of the clock.

Solution:

$$A = \pi r^2$$

$$A = \pi 4^2$$

$$A = 16\pi inch^2 or 50.27 inch^2$$

19. The area of one face of a coin is 113.09mm². Find the diameter of the coin.

Solution:

$$A=\frac{\pi d^2}{4}$$

$$113.09 = \frac{\pi d^2}{4}$$

$$113.09(4) = \pi d^2$$

$$\frac{452.36}{\pi} = d^2$$

$$d^2 = 143.99$$

$$d^2 = 143.99$$

$$d = 11.99 \text{ or } 12mm$$

The diameter of a plate is 8 inches. Find the area of the plate.

Solution:

$$A=\frac{\pi d^2}{4}$$

$$A=\frac{\pi 8^2}{4}$$

$$A=\frac{64\pi}{4}$$

 $A = 16\pi inch^2 or 50.27 inch^2$