

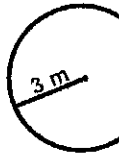
Extra Practice:

Mixed Review: Area, Circumference, Arc Length, Sector Area

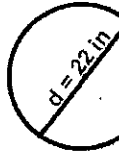
Find the Circumference of the following:  $C = 2\pi r$  or  $C = \pi d$



$C = 2\pi(4.2)$   
 $C = 26.389 \text{ cm}$

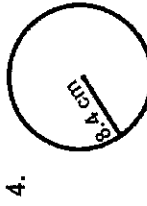


$C = 2\pi(3)$   
 $C = 6\pi$  or  $18.85 \text{ m}$

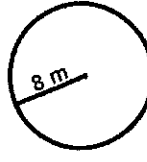


$C = \pi(22)$   
 $C = 22\pi$  or  $69.115 \text{ in}$

Find the Area of the following:  $A = \pi r^2$



$A = \pi(8.4)^2$   
 $A = 221.671 \text{ cm}^2$



$A = \pi(8)^2$   
 $A = 64\pi$  or  $201.062 \text{ m}^2$



$r = 19$   
 $A = \pi(19)^2$   
 $A = 361\pi$  or  $1134.115 \text{ in}^2$

Use the given to find the requested information:

7. The Area is  $50.25 \text{ cm}^2$ .

What is the Circle's Radius?  $4 \text{ cm}$   
 What is the Circle's Diameter?  $8 \text{ cm}$

$A = \pi r^2$   
 $\frac{50.25}{\pi} = \frac{\pi r^2}{\pi}$   
 $16 = r^2$   
 $4 = r$

Extra Practice:

Use the given to find the requested information:

8. The circumference is  $25.12$  feet.

What is the Circle's Radius?  $4 \text{ ft}$   
 What is the Circle's Area?  $16\pi$  or  $50.265 \text{ ft}^2$

$C = 2\pi r$   
 $\frac{25.12}{2\pi} = \frac{2\pi r}{2\pi}$   
 $4 = r$   
 $A = \pi r^2$   
 $A = \pi(4)^2$   
 $A = 16\pi$  or  $50.265$

Extra Practice:

Use the given to find the requested information:

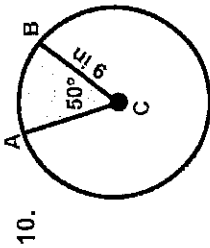
9. The Area is  $154 \text{ in}^2$ .

What is the Circle's Radius?  $7 \text{ in}$   
 What is the Circle's Circumference?  $43.982 \text{ in}$

$A = \pi r^2$   
 $\frac{154}{\pi} = \frac{\pi r^2}{\pi}$   
 $49.02 = r^2$   
 $7 = r$   
 $C = 2\pi r$   
 $C = 2\pi(7)$   
 $C = 14\pi$  or  $43.982 \text{ in}$

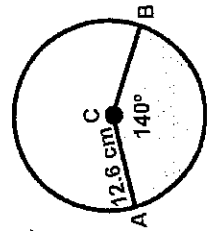
**Extra Practice:**

Find the length of  $\widehat{AB}$  where the region is shaded:



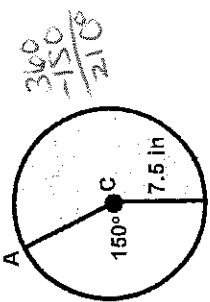
$$\frac{2\pi(9)(50)}{360}$$

$$\frac{5\pi}{2} \text{ or } 7.854 \text{ in}$$



$$\frac{2\pi(12.6)(140)}{360}$$

$$30.788 \text{ cm} \text{ or } \frac{49\pi}{5}$$



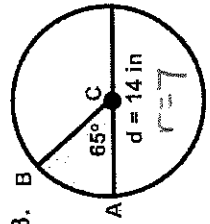
$$\frac{2\pi(7.5)(210)}{360}$$

$$27.489 \text{ in} \text{ or } \frac{35\pi}{4}$$

$$\frac{2\pi r\theta}{360}$$

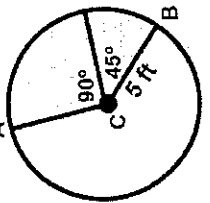
**Extra Practice:**

Find the length of  $\widehat{AB}$  where the region is shaded:



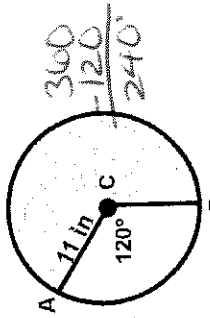
$$\frac{2\pi(7)(65)}{360}$$

$$\frac{9\pi}{360} \text{ or } 7.941 \text{ in}$$



$$\frac{2\pi(5)(135)}{360}$$

$$\frac{15\pi}{4} \text{ or } 11.781 \text{ ft}$$

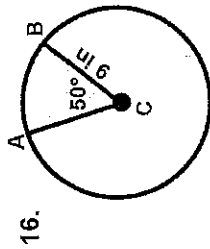


$$\frac{2\pi(11)(240)}{360}$$

$$\frac{44\pi}{3} \text{ or } 46.077 \text{ in}$$

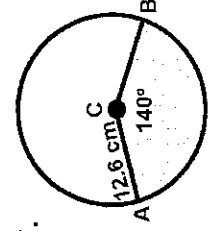
**Extra Practice:**

Find the area of the shaded region.



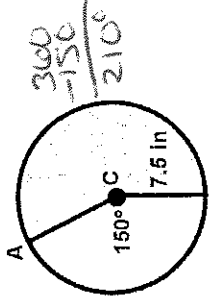
$$\frac{\pi(9)^2(50)}{360}$$

$$\frac{45\pi}{4} \text{ or } 35.343 \text{ in}^2$$



$$\frac{\pi(12.6)^2(140)}{360}$$

$$193.962 \text{ cm}^2 \text{ or } \frac{305\pi}{50}$$



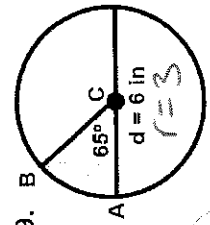
$$\frac{\pi(7.5)^2(210)}{360}$$

$$103.084 \text{ in}^2 \text{ or } \frac{585\pi}{16}$$

$$\frac{\pi r^2 \theta}{360}$$

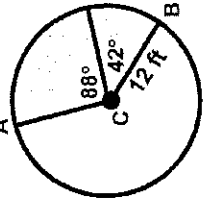
**Extra Practice:**

Find the area of the shaded region.



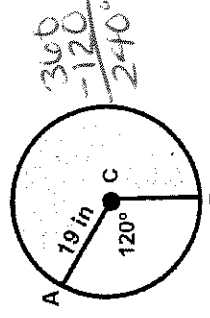
$$\frac{\pi(3)^2(65)}{360}$$

$$\frac{13\pi}{8} \text{ or } 5.105 \text{ in}^2$$



$$\frac{\pi(12)^2(130)}{360}$$

$$52\pi \text{ or } 163.363 \text{ ft}^2$$



$$\frac{\pi(19)^2(240)}{360}$$

$$\frac{722\pi}{3} \text{ or } 756.077 \text{ in}^2$$