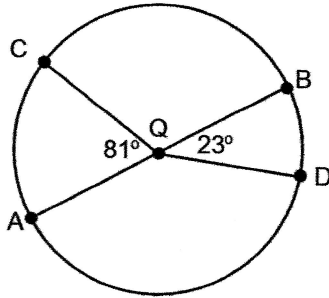


1. Use circle Q to answer the following questions. \overline{AB} is a diameter and $QC = 9$ cm. Round to the nearest hundredth.

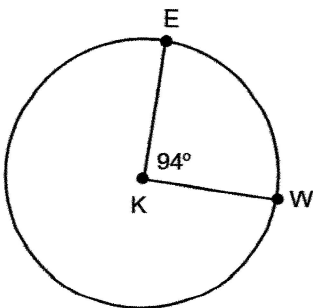


a. Find the circumference.

b. Find the length of \widehat{DCA}

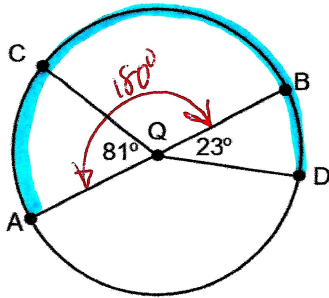
2. The circumference of a circle is 200 in. Find the diameter to the nearest hundredth.

3. Use circle K to answer the following questions. Round to the nearest hundredth.



Find the length of the radius if the length of $\widehat{EW} = 32$ ft.

1. Use circle Q to answer the following questions. \overline{AB} is a diameter and $QC = 9$ cm. Round to the nearest hundredth.



a. Find the circumference.

QC is a radius

$$C = 2\pi r = 2\pi(9) = 18\pi$$

$$C = 56.55 \text{ cm}$$

b. Find the length of \widehat{DCA}

$$m \widehat{DCA} = 180^\circ + 23^\circ = 203^\circ$$

$$\text{length of } \widehat{DCA} : \frac{203^\circ}{360^\circ} = \frac{x}{18\pi}$$

$$= 31.89 \text{ cm}$$

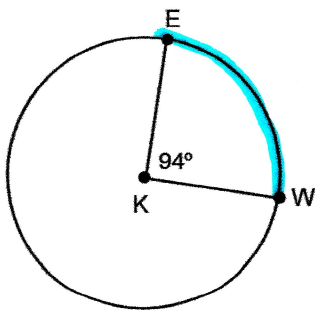
2. The circumference of a circle is 200 in. Find the diameter to the nearest hundredth.

$$C = \pi d$$

$$\frac{200}{\pi} = \frac{\pi d}{\pi}$$

$$\Rightarrow d = 63.66 \text{ in}$$

3. Use circle K to answer the following questions. Round to the nearest hundredth.



Find the length of the radius if the length of $\widehat{EW} = 32$ ft.

$$\frac{94^\circ}{360^\circ} = \frac{32 \text{ ft}}{\text{circumference}}$$

cross-multiply
to find

$$\text{circumference} = 122.55$$

$$C = 2\pi r$$

$$\frac{122.55}{2\pi} = \frac{2\pi r}{2\pi}$$

$$r = 19.41 \text{ ft}$$