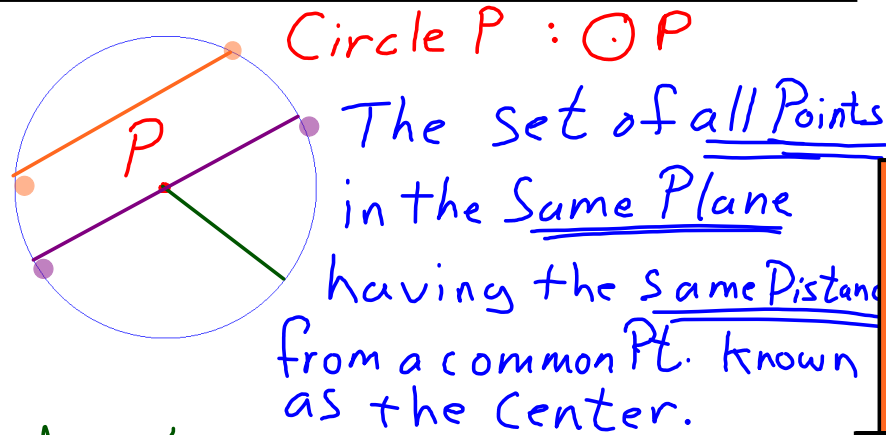


## 8.5. Circles & Circumferences

May 07, 2007



radius: ( $r$ ): the distance from the center of the circle to Any Pt. on the circle


Diameter: ( $d$ ): a chord that contains the center

Chord: Any segment whose endpoints are points on the circle.

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The Relationship Between ( $d$  &  $r$ )

$$\underline{\underline{d = 2r}} \quad \text{same} \quad \underline{\underline{\frac{1}{2}d = r}}$$

Circumference: the distance around a 

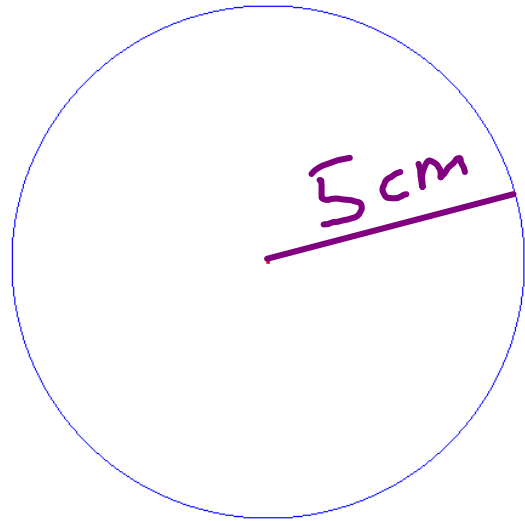
- Every Circle is divisible by  $\pi$  (pi)  
diameter                      radius

$$C = \underline{d}\pi$$

$$C = \underline{2}\pi\underline{r}$$

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for us  $\underline{\underline{\pi = 3.14}}$



Order  
#,  $\pi$ , units

find the Circumference

Here we have the Radius  
So...

$$C = 2\pi r$$

$$= 2\pi(5\text{cm})$$

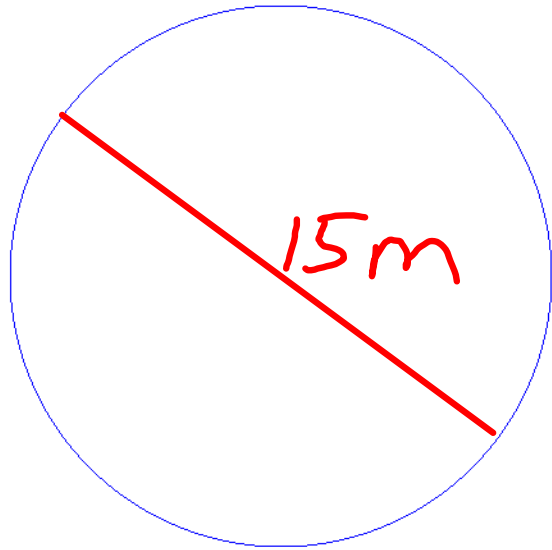
$$= 10\pi\text{cm}$$

exact

$$\approx 10(3.14)\text{cm}$$

$$\approx 31.4\text{cm}$$

approx



Find the Cir.  
here we have the diameter

$$C = d\pi$$
$$= \underline{\underline{15\pi m}} \rightarrow \text{exact}$$

$$\approx 15(3.14)m$$
$$\approx 47.1m \rightarrow \underline{\underline{\text{approx.}}}$$

The C. is 125.6m  
find the d & r of this  $\odot$

$$C = d\pi$$

$$125.6m = d\pi$$

$$\frac{125.6m}{3.14} = \frac{d \cdot 3.14}{3.14}$$

$$\underline{\underline{40m = d}}$$

$$\frac{40m}{2} = \frac{2r}{2}$$

$$\underline{\underline{20m = r}}$$

$$\pi \approx 3.14$$

$$\frac{100 = d \cdot 5}{5 \quad 5}$$

$$d = 2r$$

O.T.L.

① pg 259: Exp. 1-8 all

② pg 260: Writer:

1, 4, 7, 10, 13, 17