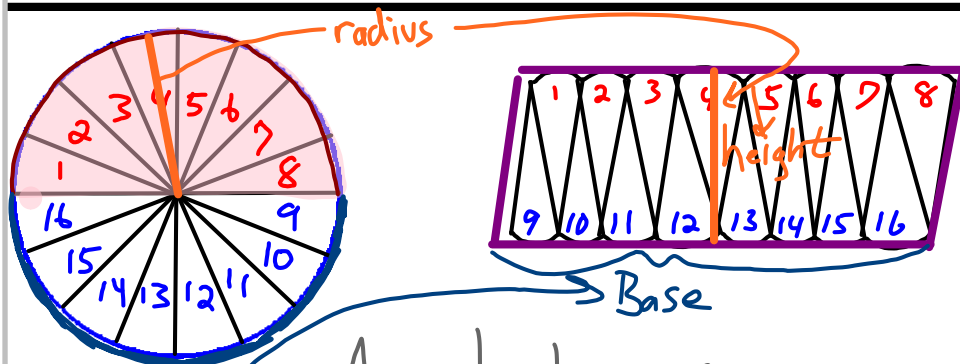


8:6 Area of a Circle

May 03, 2007



$\frac{1}{2}$ Circumference $A_p = b \cdot h$; So ... what is the base & height?

$$C = 2\pi r$$

$$C = d\pi$$

$$A_{\odot} = \frac{1}{2} \cdot 2\pi r \cdot r$$

$$A_{\odot} = \underline{\underline{\pi r^2}}$$

ex1) $r = 12\text{ m}$

find the exact
Area \odot

$$\begin{aligned} A_{\odot} &= \pi r^2 \\ &= \pi (12\text{ m})^2 \\ &= \pi \cdot 144\text{ m}^2 \\ &= \underline{\underline{144\pi\text{ m}^2}} \end{aligned}$$

order is
#, π , units

find the Approx. Ans. $\pi \approx 3.14$

$$\approx \underline{144(3.14)\text{ m}^2}$$

$$\approx \underline{\underline{452.16\text{ m}^2}}$$

ex2) The $A_{\odot} = 36\pi \text{ sq. in.}$
Find the length of the r .

$$A_{\odot} = \pi r^2$$

$$\frac{36\pi \text{ in}^2}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{36 \text{ in}^2} = \sqrt{r^2}$$

$$\underline{\underline{6 \text{ in} = r}}$$

$$\begin{array}{r} 9x = 27 \\ \frac{9x}{9} = \frac{27}{9} \\ x = 3 \end{array}$$

O.T.L.

① Pg 262: Exp. : 1-4(a)
6-9(a)