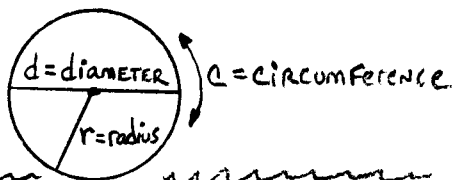


TERMS:



FORMULA:

$$\frac{C}{d} = \pi \approx \underline{\underline{3.14}}$$

* LOOK USE THIS FOR PI

$$\text{area} = a = \pi r^2$$

$$r = \frac{1}{2} \cdot d \quad \text{OR} \quad d = 2r$$

$$\therefore C = \pi d \quad \text{OR} \quad d = \frac{C}{\pi}$$

EX) Find: C, a for



SOLUTION: Since

$$\frac{C}{d} = \pi \quad \text{OR} \quad \pi d = C$$

$$(3.14)(10) = C$$

$$\boxed{31.4 = C} \text{ inches}$$

$$a = \pi r^2 \quad \text{since } r = \frac{1}{2} \cdot d \quad r = 5 \text{ inches}$$

$$\therefore a = (\pi)(5)^2 = (\pi)(5 \cdot 5) = \pi \cdot 25$$

$$a = 3.14 \cdot 25$$

$$\boxed{a = 78.5 \text{ in}^2}$$

Find $r = \text{radius}$ for circles with the following diameters:

① $d = 12 \text{ in}$ $r = \underline{\hspace{2cm}}$

② $d = 6 \text{ cm}$ $r = \underline{\hspace{2cm}}$

③ $d = 64 \text{ m}$ $r = \underline{\hspace{2cm}}$

④ $d = 9.6 \text{ mm}$ $r = \underline{\hspace{2cm}}$

Find $C = \text{circumference}$ for circles with the following diameters:

⑤ $d = 100 \text{ in}$ $C = \underline{\hspace{2cm}}$

⑥ $d = 14 \text{ cm}$ $C = \underline{\hspace{2cm}}$

Find the area of the circles given the following:

⑦ $d = 9 \text{ m}$ $a = \underline{\hspace{2cm}}$

⑧ $r = 4 \text{ in}$ $a = \underline{\hspace{2cm}}$

⑨ Find 3 circular objects AT HOME, measure C, d then find $\frac{C}{d}$. Use AND COMPLETE THE TABLE BELOW FOR THIS. Use cm*

NOTE: there are 2.54 cm per inch.

| DESCRIPTION OF ITEM | C (measure) | d (measure) | C/d (CALCULATE) |
|---------------------|-------------|-------------|-----------------|
| I | | | |
| II | | | |
| III | | | |

(cm)

(cm)