

## 7-4 Circumference of circles

$$\pi \approx 3.14 \text{ OR } \frac{22}{7}$$

$$C = \pi d$$

↓ circumference      → diameter

**\*ALWAYS WRITE FORMULA**



$$C = \pi d$$

$$C = 3.14 \times 8$$

$$C = 25.12 \text{ in}$$

$$\begin{array}{r} 3.14 \\ \times 8 \\ \hline 25.12 \end{array}$$

2)



$$r = 5$$

$$d = 2r$$

$$d = 10$$

$$C = \pi d$$

$$C = 3.14 \times 10$$

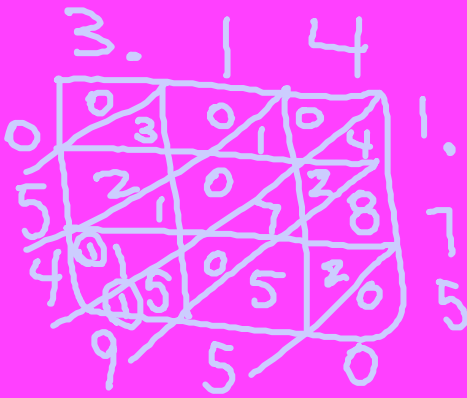
$$C = 31.4 \text{ in}$$

3)  $d = 1.75 \text{ ft}$

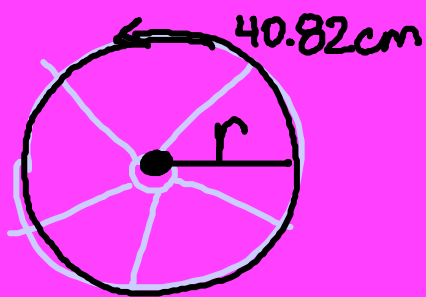
$$C = \pi d$$

$$C = 3.14 \times 1.75$$

$$C = 5.4950 \text{ ft}$$



4) A wheel has a circumference of 40.82 cm.  
Find the radius.



$$C = \pi d$$
$$\frac{40.82}{3.14} = \frac{3.14 d}{3.14}$$

\* mental note:  
looking for  
r

$$\begin{array}{r} \phantom{00}0013 \\ 3.14 \overline{) 40.82} \\ \underline{314} \phantom{0} \\ 942 \\ \underline{942} \\ 0 \end{array}$$

$$13 = d$$

\* need r

$$\frac{d}{2} = r$$
$$\frac{13}{2} = \boxed{6.5 \text{ cm} = r}$$

In higher level math classes, you can leave answers "in terms" of  $\pi$ .

Ex

$$C = \pi d$$

$$C = \pi \times 3$$

$$C = 3.14 \times 3$$

$$C = 12.56 \text{ cm}$$

OR  $C = 3\pi$

same thing