

12-2 Area of Circles

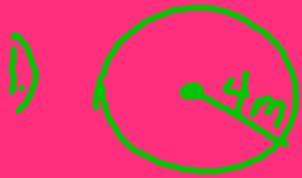
Area - # of square units needed to cover an object

Formula: $A = \pi r^2$

Round Review: $7.\underline{8}9 \approx 7.9$

$31.\overset{\cdot}{9}\overset{\cdot}{8} \approx 32$
 32.0

*FORMULA IS!!



$$A = \pi r^2$$

$$A = 3.14 \times 4^2$$

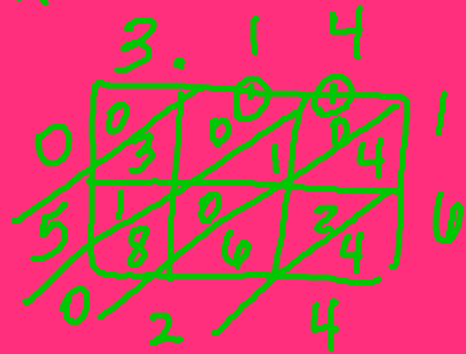
$$A = 3.14 \times 16$$

$$A = 50.\underline{2}4$$

$$A = 50.2\text{m}^2$$

means
4x4

*Area units
ALWAYS
SQUARED



2)



*Gave us a diameter.
MUST find radius by $\div 2$.

$$r = \frac{10}{2} = 5$$

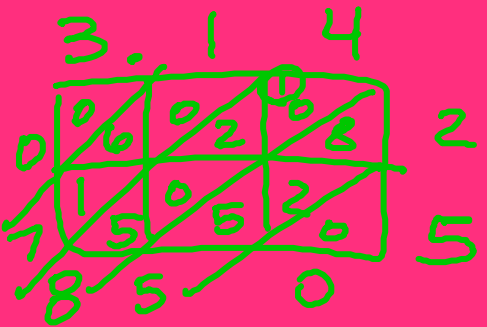
$$A = \pi r^2$$

$$A = 3.14 \times 5^2 \rightarrow 5 \times 5$$

$$A = 3.14 \times 25$$

$$A = 78.50$$

$$A = 78.5 \text{ cm}^2$$



3) $d = 15.6\text{m}$
 * must find r .

$$r = \frac{15.6}{2} = 7.8$$

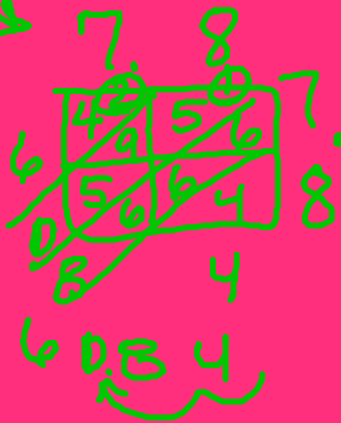
$$A = \pi r^2$$

$$A = 3.14 \times (7.8)^2$$

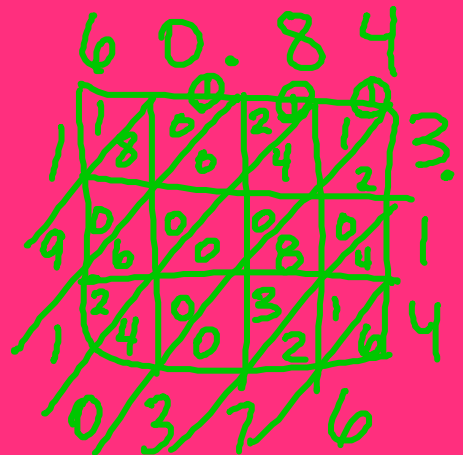
$$A = 3.14 \times 60.84$$

$$A = 191.0376$$

$$A = 191\text{m}^2$$



$$\begin{array}{r} 07.8 \\ 2 \overline{) 15.6} \\ \underline{14} \\ 16 \\ \underline{16} \\ 0 \end{array}$$



$$1910376$$

$$4) r = 5.5 \text{ cm}$$

$$A = \pi r^2$$

$$A = 3.14 \times (5.5)^2$$

$$A = 3.14 \times 30.25$$

$$A = 949.850$$

$$A = 950 \text{ cm}^2$$

