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## Practice C Puzzler - Circumference and Area of Circles

$$
\begin{aligned}
& A=\pi r^{2} \\
& C=\pi d \text { or } C=2 \pi r
\end{aligned} \quad d=\frac{C}{\pi}
$$

Find the circumference, area, diameter, or radius using the given information. Use 3.14 for $\pi$, and round answers to the nearest tenth. Number one has been completed for you.

$C \approx$ $\qquad$
13)


$A=$ $\qquad$
$C \approx$ $\qquad$
$A \approx$ $\qquad$ $d \approx$ $\qquad$
8) $r=0.5 \mathrm{~cm}$
$C \approx$
$A \approx$
12)
 ,
3)

$A=$ $\qquad$

| $153.9=\mathrm{K}$ | $0.8=\mathrm{U}$ |  | 254.3 = $\top$ | $46.2=\mathrm{S}$ | $95=A$ | $3.14=\mathrm{H}$ | 120.1 = N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $9=\mathrm{R}$ | $18 \cdot 8=1$ | $5.3=C$ | 132.7 = P | 28.3 = Y | 39.3 = L | $31.4=\mathrm{E}$ | $50.2=\mathrm{F}$ |

What's one important fact learned from this lesson?

$$
\overline{9} \overline{7} \overline{15} \overline{14} \overline{3} \overline{6} \quad \overline{8} \overline{15} \overline{9} \quad \overline{15} \overline{12}
$$

$$
\overline{10} \overline{12} \overline{12} \overline{15} \overline{5} \overline{10} \overline{14} \overline{15} \overline{13} \overline{13} \overline{6}
$$

5) $r=9 \mathrm{~km}$
$A \approx$ $\qquad$
6) $d=14.7 \mathrm{ft}$
$C \approx$ $\qquad$ $C \approx$ $\qquad$ $A \approx$ $\qquad$
7) $r=0.5 \mathrm{~cm}$
8) $d=10$ in
9) $r=4.5 \mathrm{yd}$
10) $d=13 \mathrm{~m}$

$$
\overline{11} \frac{1}{1} \overline{14} \overline{13} \overline{10} \overline{13} \overline{15} \overline{14} \quad \overline{2} \overline{15} \overline{11} \frac{4}{4}
$$

$\qquad$

| $A=\pi r^{2}$ <br> $C=\pi d$ or $C=2 \pi r$$\quad d=\frac{C}{\pi}$ |
| :--- |

Getting Real with Circumference and Area of Circles

Answer the following word problems. Use 3.14 for $\pi$. Round answers to the nearest hundredth, and be sure to label all answers.


1. The center circle of a basketball court has a diameter of 12 feet. What is the area of the circle?
2. The opening of a giant sink hole has a diameter of 19.5 meters. What is the circumference of the sink hole?
3. An American quarter has a radius of 12.3 mm . What is the circumference of a quarter?

4. A round Jacuzzi has a diameter of 8.2 feet. How much area will the Jacuzzi take up on a patio?
5. The Oakdale County Park is a perfect circle with a diameter of 1 kilometer. What is the area of the park?
6. Gordon the Goat is tethered to a post in the middle of a barnyard with a 14.5 foot rope. He can walk $360^{\circ}$ around the post.
a. What is the greatest circumference of a circle that Gordon can walk?
b. What is the total area of barnyard that this circle covers?

7. The circumference of a round picnic table is 18.84 feet. A homeowner who bought the table wants to drill a hole in the very center to insert a sunbrella. If she can find the radius of the table, she will know exactly where to drill the center hole. What is the radius of the picnic table?
