

Lesson 11-3

Example 1 Find Circumference

SWIMMING POOL A new pool being built at a local community center is circular in shape and has a diameter of 25 feet. Find the circumference of the pool.

Estimate $C = 3 \cdot 25$ or 75 feet

$C = \pi d$ Circumference of a circle

$C \approx 3.14(25)$ Replace π with 3.14 and d with 25.

$C \approx 78.5$ Multiply.

So, the distance around the swimming pool is about 78.5 feet.

Example 2 Find Circumference

Find the circumference of a circle with a radius of 42 centimeters.

Since 42 is a multiple of 7, use $\frac{22}{7}$ for π .

$C = 2\pi r$ Circumference of a circle

$C \approx 2 \cdot \frac{22}{7} \cdot 42$ Replace π with $\frac{22}{7}$ and r with 42.

$C \approx 264$ Multiply.

So, the circumference of the circle is about 264 centimeters.