Finding the Area of a Circular Region
Windjammer Center, Aquatic Adventure Subtask 3: Include some goldfish.

Vocabulary:

The formula for the area of a circular region is: $A = \pi r^2$ where $r$ represents the radius of the circle.

Example 1: The radius of a circle is 8 meters. Find the area of the circle.

\[
A = \pi r^2 \\
A = \pi (8\text{ m})^2 \\
A = \pi (64\text{ m}^2) \\
A \approx 201.06\text{ m}^2
\]

Answer: The area of the circle is about 201.06 m$^2$.

Example 2: The diameter of a circle is 8 meters. Find the area of the circle.

The diameter is 8 meters, so the radius is half of 8 meters. The radius is 4 meters.

\[
A = \pi r^2 \\
A = \pi (4\text{ m})^2 \\
A = \pi (16\text{ m}^2) \\
A \approx 50.27\text{ m}^2
\]

Answer: The area of the circle is approximately 50.27 m$^2$. 

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