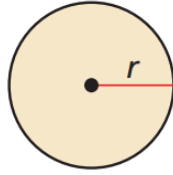


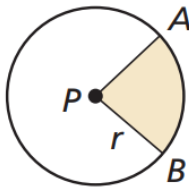
## Core Concept

The **area** of a circle is



**Formula:**

$$A = \underline{\hspace{2cm}}$$

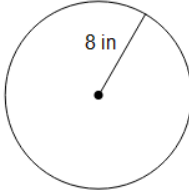
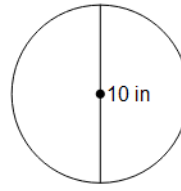
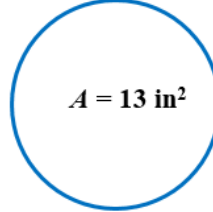
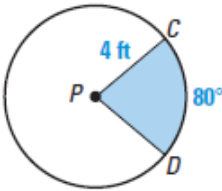
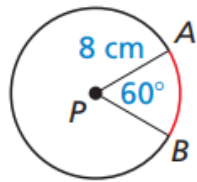


To find the **area of a sector**, find a portion of the area of the whole circle.

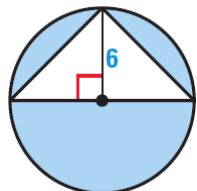
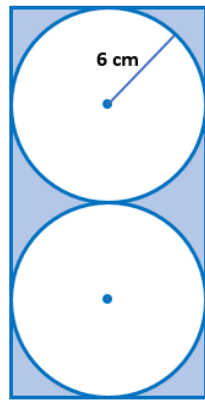
**Formula:**

$$\text{Area of sector } APB = \frac{mAB}{360^\circ} \left( \quad \right)$$

Give the simplified form of the exact answer in terms of  $\pi$  and the decimal approximation. (to the nearest hundredth)

<p>1) Find the area.</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>	<p>2) Find the area.</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>	<p>3) Find the radius.</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>r =</math>                      <math>r \approx</math> </div>
<p>4) Find the area of the sector formed by <math>\angle FDE</math></p> <p style="text-align: center;">Area of sector <math>FDE = \frac{\quad}{360^\circ} \left( \quad \right)</math></p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>	<p>5) Find the area of the sector <math>APB</math></p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>	

Find the shaded area. Sketch a “plan.” Show an expression with formulas. Substitute and simplify.

<p>6)</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>	<p>7) Find the perimeter.</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <math>A =</math>  <math>A \approx</math> </div>
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