Arc length and area of a sector of a circle:
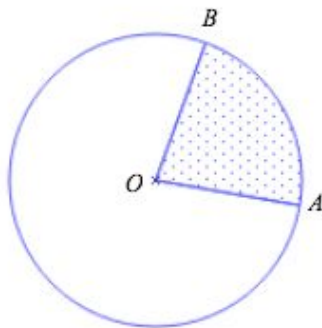
Arc length and area of a sector of a circle

The circle below has center O, and its radius is 6 m. Given that $m \angle AOB = 80°$, find the length of $\overset{\frown}{AB}$ and the area of the shaded region.
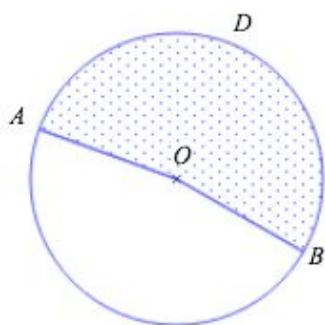
Give exact answers in terms of π, and be sure to include the correct units in your answer.

Arc length and area of a sector of a circle

The circle below has center O, and its radius is 5 yd. Given that $m \angle AOB = 170°$, find the length of $\overparen{ADB}$ and the area of the shaded region.

Give exact answers in terms of π, and be sure to include the correct units in your answer.

Arc length and area of a sector of a circle

The circle below has center O, and its radius is 2 ft. Given that $m \angle AOB = 100°$, find the length of $\overparen{AB}$ and the area of the shaded region.

Give exact answers in terms of π, and be sure to include the correct units in your answer.