

### 1.0.1. Area of sector of a circle

The region shaded in Figure 1.1 is a sector of a circle. You have found the area of a circle, a semicircle, and a quarter circle. Can you find the area of sector OPQ? Give the exact answer. Hint: a full circle is  $360^\circ$ .

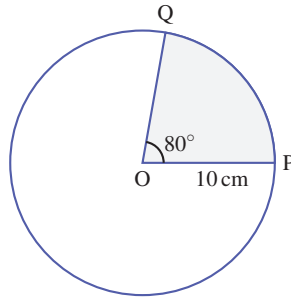


FIGURE 1.1. The sector OPQ is shaded. The central angle is  $80^\circ$ .

**1.0.2. Arc length**

Can you find the length  $s$  of the arc in Figure 1.2? Give the exact answer.

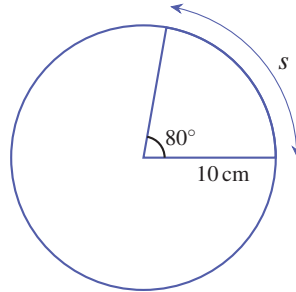


FIGURE 1.2. The central angle is  $80^\circ$ .