

## 3.20 Sector of a Circle

Radius of a circle:  $R$

Arc length:  $s$

Central angle (in radians):  $x$

Central angle (in degrees):  $\alpha$

Perimeter:  $L$

Area:  $S$

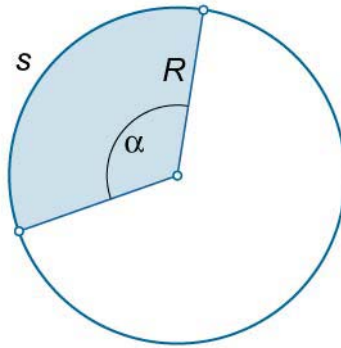


Figure 35.

**267.**  $s = Rx$

**268.**  $s = \frac{\pi R \alpha}{180^\circ}$

**269.**  $L = s + 2R$

**270.**  $S = \frac{Rs}{2} = \frac{R^2 x}{2} = \frac{\pi R^2 \alpha}{360^\circ}$