

3.19 Circle

Radius: R
Diameter: d
Chord: a
Secant segments: e, f
Tangent segment: g
Central angle: α
Inscribed angle: β
Perimeter: L
Area: S

260. $a = 2R \sin \frac{\alpha}{2}$

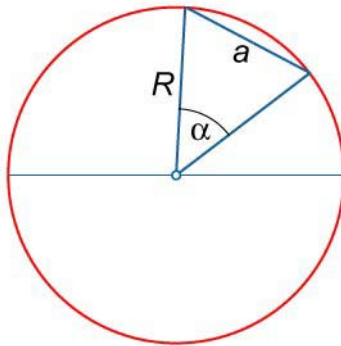


Figure 30.

261. $a_1 a_2 = b_1 b_2$

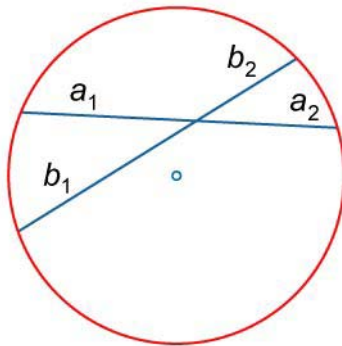


Figure 31.

262. $ee_1 = ff_1$

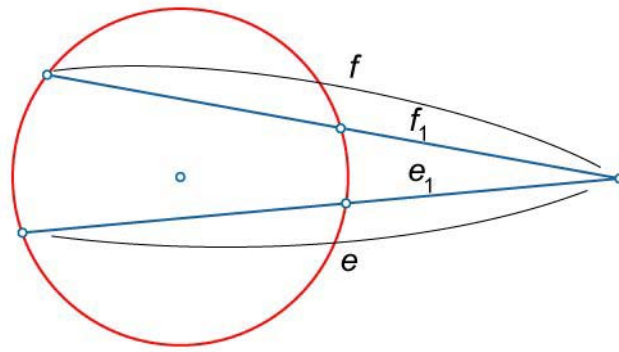


Figure 32.

263. $g^2 = ff_1$

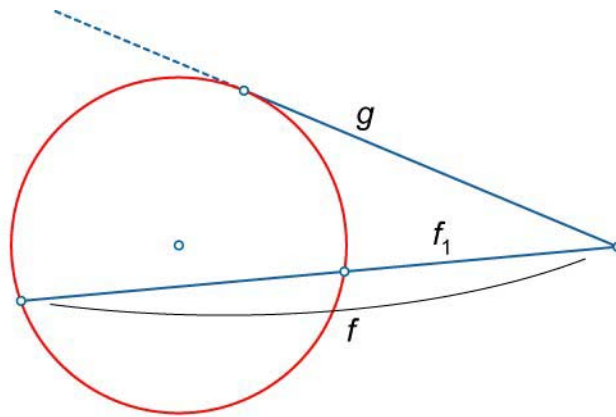
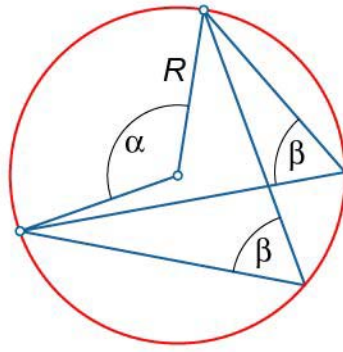


Figure 33.

264. $\beta = \frac{\alpha}{2}$

Figure 34.



265. $L = 2\pi R = \pi d$

266. $S = \pi R^2 = \frac{\pi d^2}{4} = \frac{LR}{2}$