14.6 Area of Sector and Arc Length Notes

1. Arc Length = 30/360 (2*12*π) = 2π
   Area of Sector = 30/360 (12^2π) = 12π squared units

2. Diameter = 20, radius = 10
   Arc Length = 72/360 (20*π) = 4π
   Area of Sector = 72/360(10^2π) = 20π squared units

3. Diameter = 30, radius = 15
   Arc Length = 108/360 (30π) = 9π
   Area of Sector = 108/360(15^2π) = 67.5π squared units

4. Area of Sector = (60/360 * 10^2π) = 16.67π
   Area of Triangle = 253 = (16.67π - 253) = 9.069 squared units
5. Area of Sector - Area of Triangle = (90/360)*8^2π = (16π - 32) = 18.27 sq un

6. Area of Sector = 60/360*14^2π = 32.67π
   Area of Triangle = 493

Area of Sector - Area of Triangle = (32.67π - 493) = 17.77 squared units