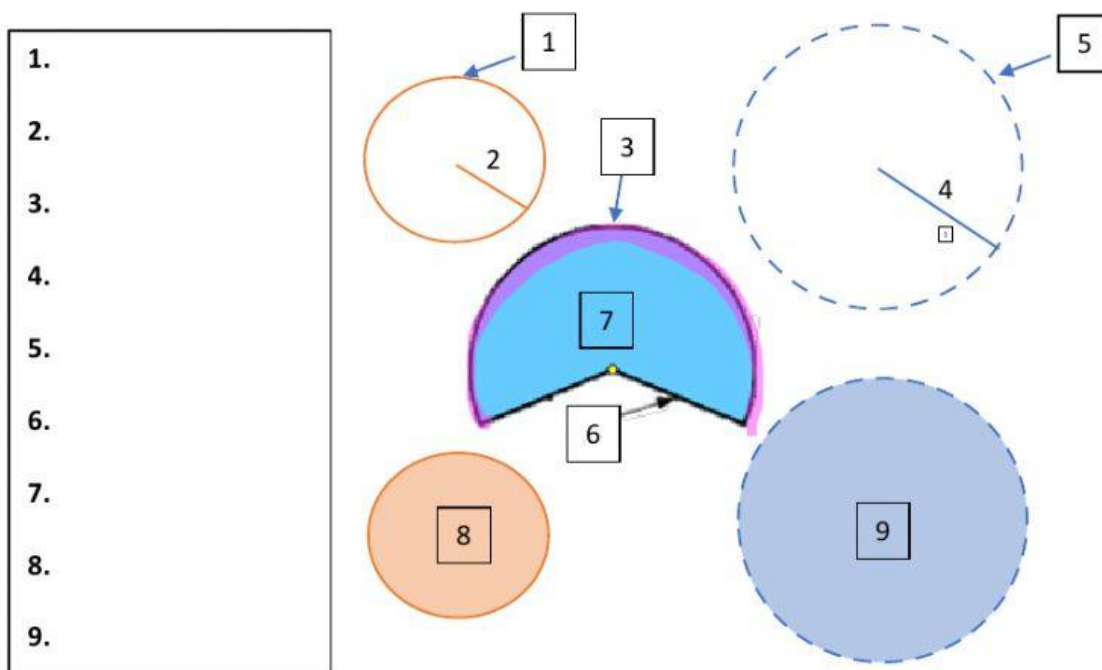


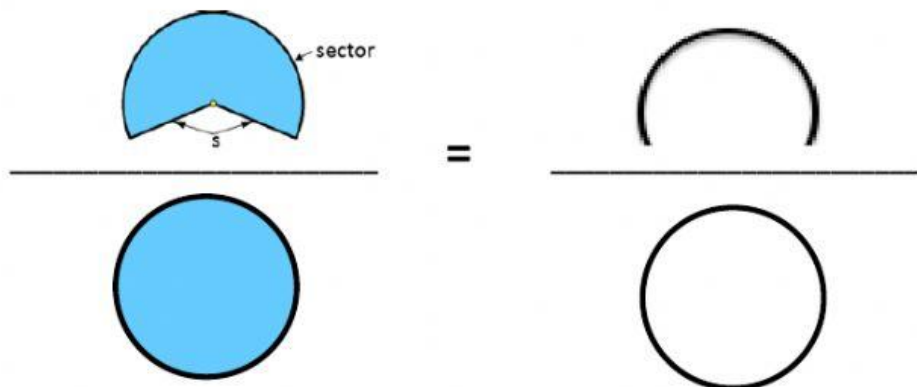
Derive the Surface Area of Any Cone.

Important parts from diagram in your note packet.



Fill in the correct part above with the proportion below.

$$\frac{\text{Area of Sector}}{\text{Area of Circle with the same radius}} = \frac{\text{Arc Length of Sector}}{\text{Circumference of Circle with the same radius}}$$



Cross multiply and solve for the area of the sector.

The Surface Area formula for any cone is simply:

$$SA = \text{circle} + \text{sector}$$