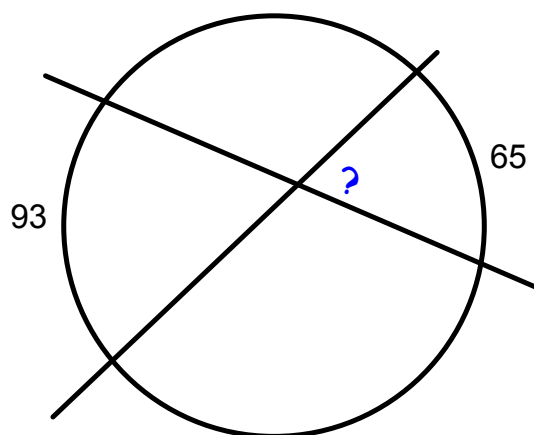


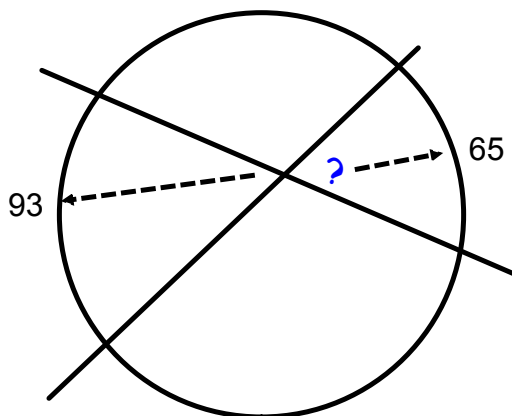
Secant angle with vertex inside the circle

Example 1:



$$\frac{\text{Arc} + \text{Arc}}{2}$$

Even though these arcs are not equal, they appear vertical. They are not equal because the intersection of these 2 lines is not at the center



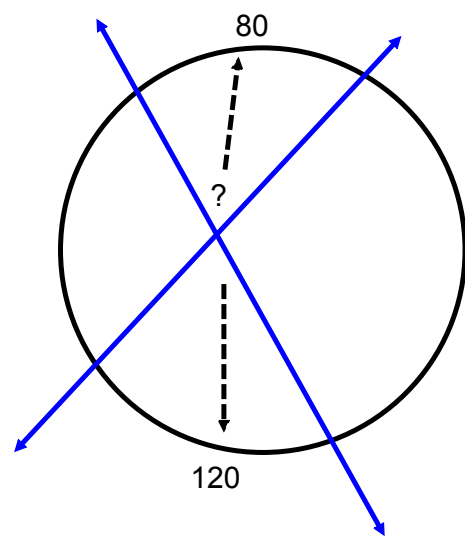
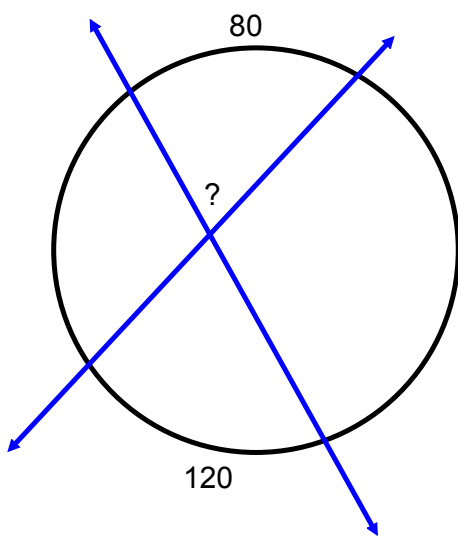
Formula is to add the 2 ARCs that run same direction and then divide them by 2

$$\frac{\text{Arc} + \text{Arc}}{2}$$

$$93 + 65 = 158$$

$$158 / 2 = 79$$

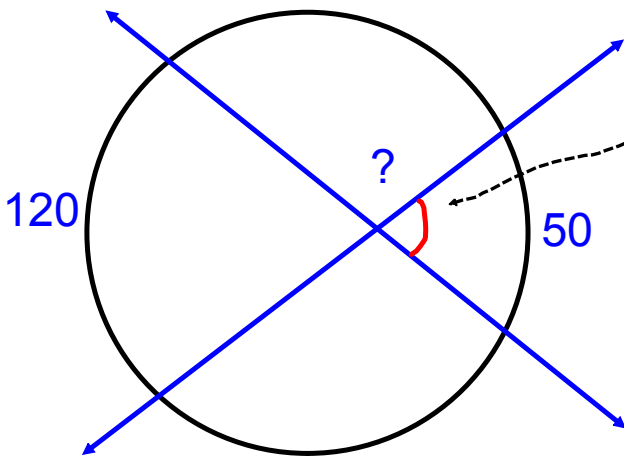
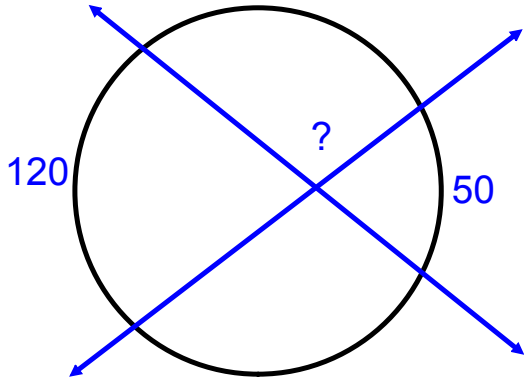
example 2:



$$\frac{\text{Arc} + \text{Arc}}{2}$$

$$\frac{80 + 120}{2} = \frac{200}{2} = 100$$

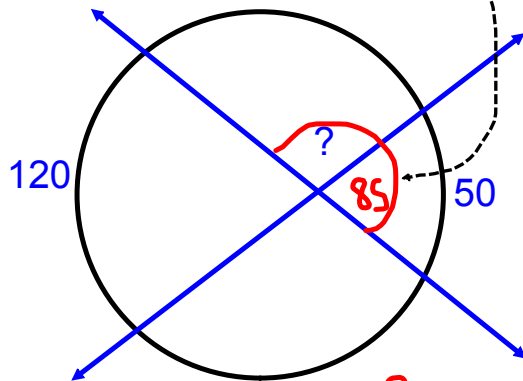
example 3



find this one first

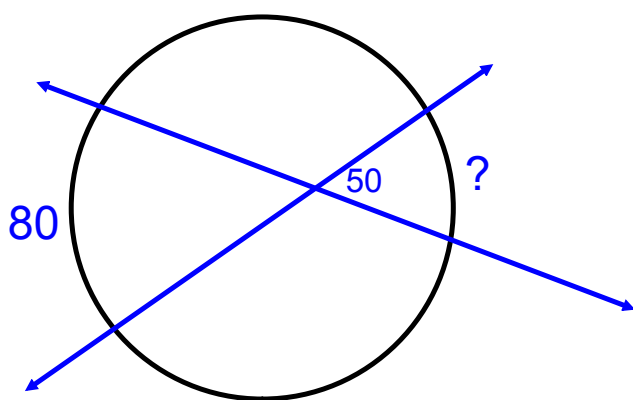
$$\frac{120 + 50}{2}$$

$$85$$



$$85 + ? = 180$$

Finding a missing arc



$$\frac{\text{Arc} + \text{Arc}}{2} = \text{angle}$$

plug in and solve for missing arc

$$\frac{x + 80}{2} = 50$$

$$x + 80 = 100$$

$$x = 20$$