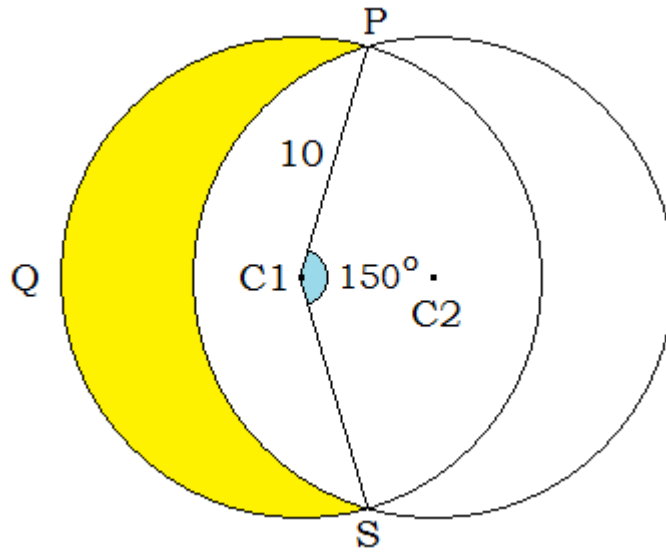


# Princess Vulnavia presents ... Cloud 9; Revision Raindrops

## Crescent Area

### Raindrop 8



The diagram shows two circles, each of radius 10 units, which partially overlap.  $C_1$  and  $C_2$  are the centres of the circles.

The minor sector angle  $PC_1S$  is  $150^\circ$ .

Find the area of the shaded crescent in terms of  $\pi$ .

The answer follows on the next page ...

# Princess Vulnavia presents ... Cloud 9; Revision Raindrops

## Raindrop 8

Answer: The crescent area =  $\frac{50}{3}(\pi + 3)$