



FWC  
Entrance

April 28, 2023, Duration 30  
min

1. In the given figure 1.1, a circle is inscribed in a quadrilateral  $ABCD$  in which  $\angle B = 90^\circ$ . If  $AD = 17\text{cm}$ ,  $AB = 20\text{cm}$  and  $DS = 3\text{cm}$ , then find the radius of the circle.

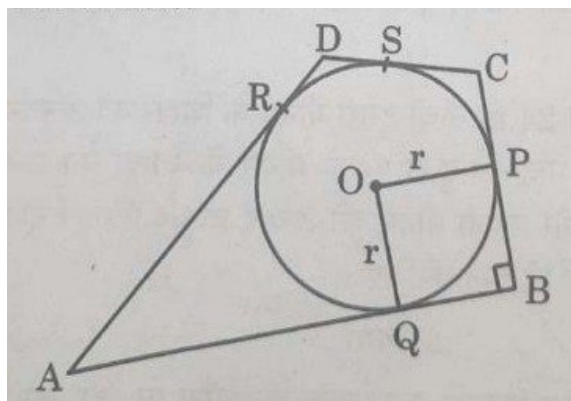


Fig. 1.1

2. 250 logs are stacked in the following manner:  
22 logs in the bottom row, 21 in the next row, 20 in the row next to it and so on (as shown in 2.1). In how many rows, are the 250 logs placed and how many logs are there in the top row?

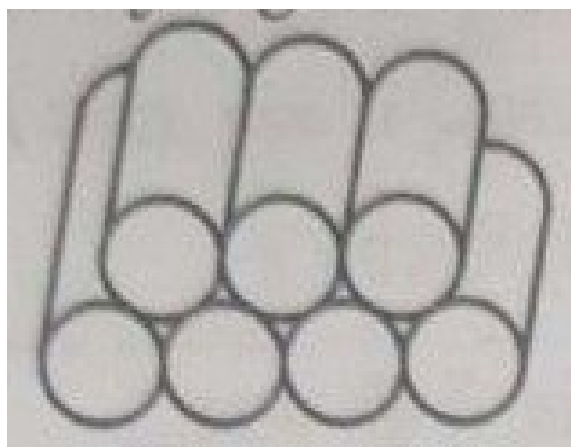


Fig. 2.1