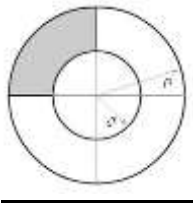


**CLASS-X MATHEMATICS**  
**AREAS RELATED TO CIRCLES**  
**HANDOUT MODULE – 2/2**

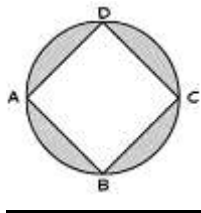
1. Area of the figure = Area of the rectangle + 2 x Area of semi circles.



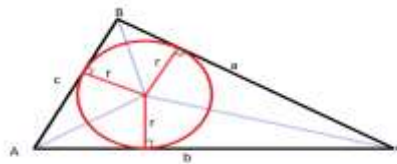
2. Area of the unshaded region =  $\frac{3}{4}(\pi r_1^2 - \pi r_2^2)$ .



3. Area of the shaded region =  $\pi r^2 - a^2$ .



4. Inradius =  $\frac{\text{Area of triangle } ABC}{\text{Semiperimeter of the triangle}}$   
 $r = \frac{A}{S}$  or  $r = \frac{a+b-c}{2}$



5. Circumradius(R) =  $\frac{abc}{4A}$

