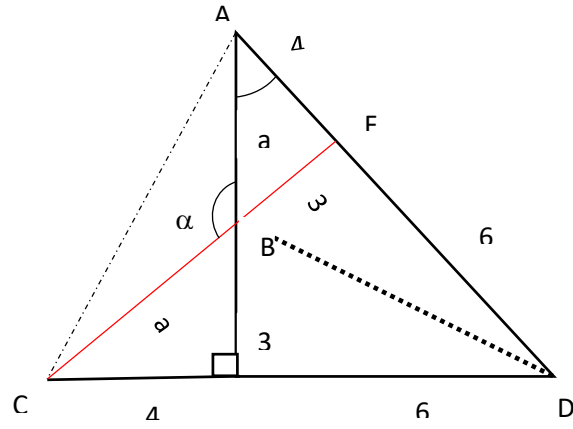


Trigo and Geometry



Given : Area of ΔABD , Area of ΔCBD

Is $15 = \frac{10.3}{2}$ Find $\sin\alpha$

$$3^2 + 4^2 = a^2 \Rightarrow a^2 = 25, a = 5$$

Area of ΔACD is $\frac{10.8}{2} = 40$

Area of 2 triangles is $15 \times 2 = 30$

Area of ΔABC is $40 - 30 = 10$

$$S = \frac{a^2 \sin\alpha}{2} = \frac{5^2 \sin\alpha}{2} = 10$$

$$\sin\alpha = \frac{20}{25} = 0.80$$