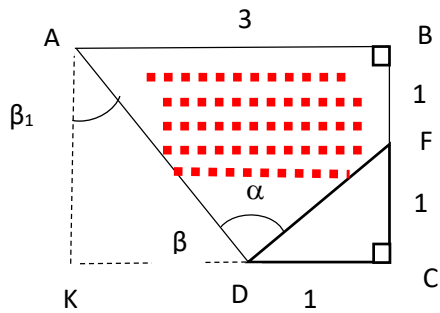


Geometry



Given : $BF=FC=DC=1$, Trapezoid

$AK \parallel BC$

$AK = 1 + 1$

$KC = AB = 3$

$KD = 3 - 1 = 2$

$AK = KD$, $\sphericalangle K = 90^\circ$

$$\beta = \beta_1 = \frac{180^\circ - 90^\circ}{2} = 45^\circ$$

$\beta + \alpha + \sphericalangle FDC = 180^\circ$

$$\sphericalangle FDC = 45^\circ$$

$$\alpha = 90^\circ$$