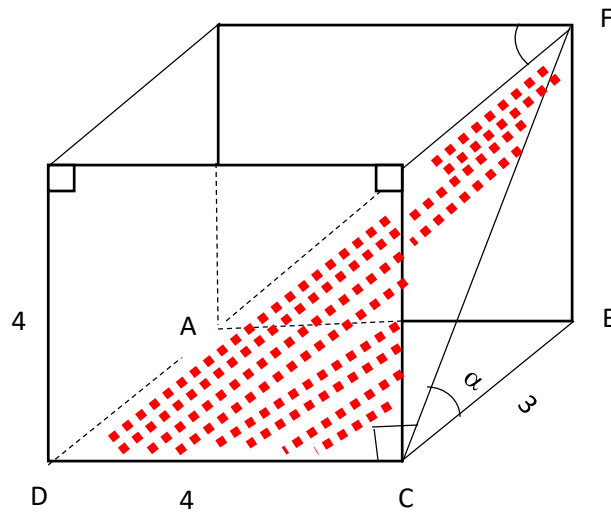


Space 1

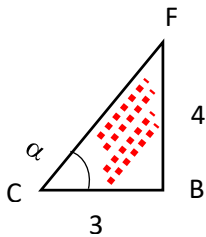


Find the angle  $\alpha$  between planes P and  $\pi$ , DCF is the plane P the floor is  $\pi$ .

Calculate

- (1)  $\tan \alpha = ?$
- (2)  $DF = ?$
- (3) Area  $A_{\triangle DEF} = ?$

$\alpha$  is the angle between planes P and  $\pi$



$$\tan \alpha = \frac{4}{3}$$

$$(CF)^2 = 3^2 + 4^2$$

$$(CF)^2 = 25, \quad CF = 5$$

$$(DF)^2 = 4^2 + (CF)^2$$

$$(DF)^2 = 4^2 + 25 = 41 \Rightarrow DF = \sqrt{41}$$

$$(3) \quad \text{The area of } \triangle DCF \quad A = \frac{4 \cdot 3}{2} = 6$$