DATE
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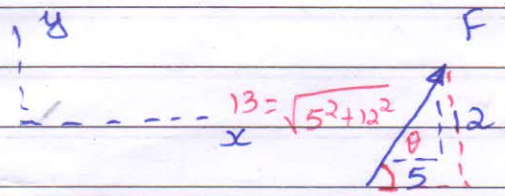

Given

$F_y = 320\ N$

TO find

x- component of F

Solution

$\tan\theta = \frac{12}{5}$ $\qquad$ $\sin\theta = \frac{12}{13}$

$\therefore \cos\theta = \frac{5}{13}$ $\qquad$ $F_y = F\sin\theta$

$\therefore F = \frac{F_y}{\sin\theta} = \frac{320}{(12/13)}$

$= 346.67\ N$

$F_x = F\cos\theta$

$= F_x\cos\theta$

$= \frac{346.67 \times 5}{13}$

$= 133.33\ N$