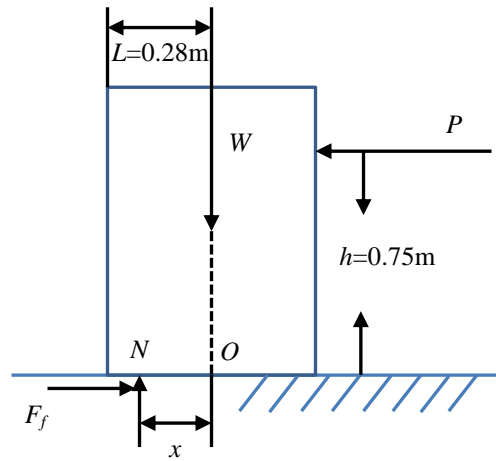5. A normal distributed external force $P \sim N(10, 0.2^2)$ lb is applied to push a box which has a weight of 25 lb. Determine the probability that the box may tip over if the coefficient of friction between the box and floor is $\mu_s = 0.2$.

Answer

The probability that the box might tip over is 99.96%.