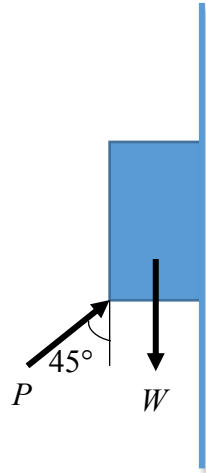


14. A crate with weight $W \sim N(450, 10^2)$ N is pushed against the wall by a force $P \sim N(550, 30^2)$ N. The coefficient of static friction between the crate and wall is $\mu_s = 0.25$. Determine the probability that the crate will slip. P and W are distributed independently.



Solution

The probability that the crate will slip is 0.0013. **Ans.**