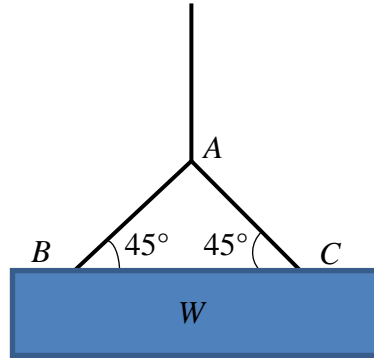5. Cords AB and AC can each sustain a maximum tension $T \sim N(660, 8^2)$ N. If the weight is $W \sim N(920, 5^2)$ N and is independent with tension T. Determine the probability that the cord will fail?

Solution

The probability of the cord failure is $p_f = 0.1397$