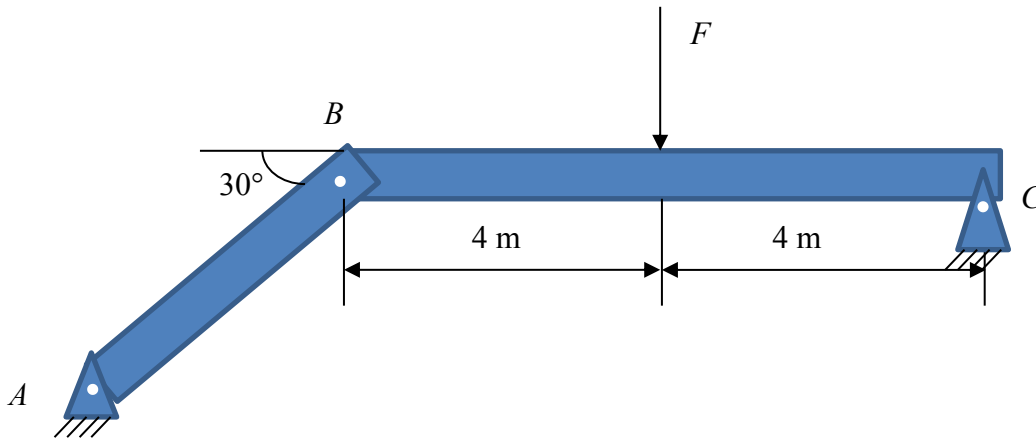


6. Force F follows a normal distribution $F \sim N(1800, 20^2)$ N. What is the probability that member AB will fail if the maximum normal force in AB follows $T \sim N(1900, 30^2)$ N? F and T are independently distributed.



Solution

The probability of member BC failure is 0.0028. **Ans.**