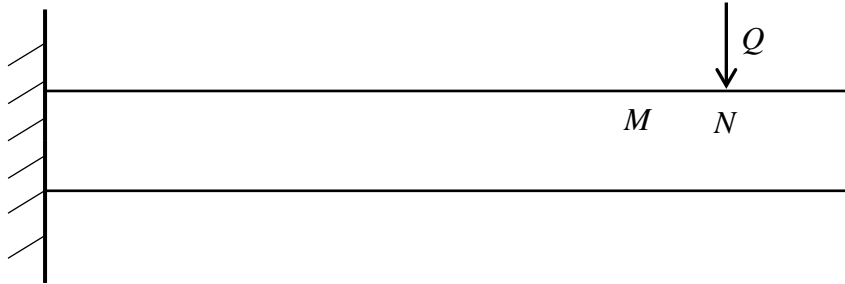For problem 7, if the bending failure occurred, what are the probabilities that the force Q acts at M and N, respectively?

Solution

$$P(M|B) = \frac{P(M)P(B|M)}{P(B)} = \frac{0.001(0.6)}{0.0014} = 0.4286$$

$$P(N|B) = \frac{P(N)P(B|N)}{P(B)} = \frac{0.002(0.4)}{0.0014} = 0.5714$$