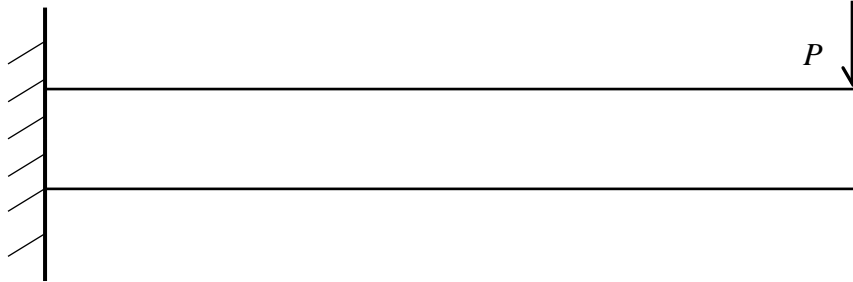


A cantilever beam is subjected to a force P . The probabilities of failure due to bending and shear are 0.003 and 0.0008, respectively. If the event of bending and shear are independent, what is the reliability of this cantilever beam?



Solution

The reliability of beam $R = 0.9962$