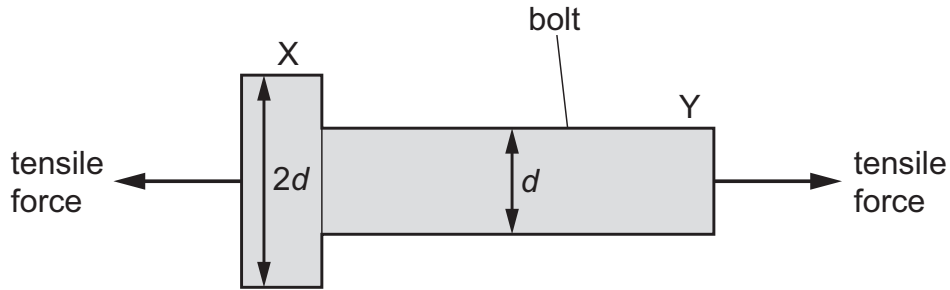


20 A bolt is subjected to a tensile force, as shown.



The bolt has a circular cross-section. At end X, the diameter is $2d$. At end Y, the diameter is d .

What is the ratio $\frac{\text{stress at Y}}{\text{stress at X}}$?

A 0.25

B 0.50

C 2.0

D 4.0