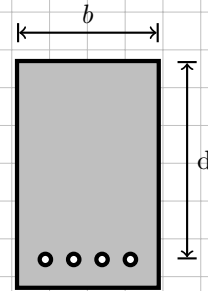


Beam Analysis

Select the area of steel, A_s , cross section width, b , and effective depth d for the cross section shown.



1 Solution Strategy

To solve this problem we must start with the basic design relationship, assume the steel is yielding,

We start with the basic design relationship $\phi M_n \geq M_u$. The nominal moment can be substituted in for the moment when taking moments about the concrete compressive force.