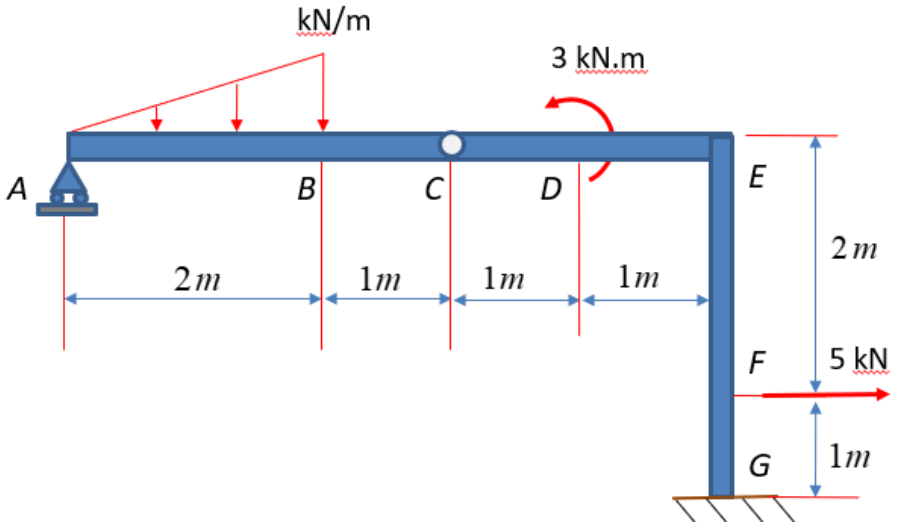
Maximum value of the uniform load of the triangle to limit the bending at AB to 5 kN.m



$$\sum M_c^L = 0 \rightarrow 3V_a - \frac{2.q}{2}\left(1+\frac{2}{3}\right) = 0 \rightarrow V_a = \frac{5q}{9}\ \text{kN}$$

$$q(x) = \frac{qx}{2} \rightarrow V_T(x) = \frac{qx^2}{4} \rightarrow M_T(x) = \frac{qx^3}{12}$$

$$V(x) = \frac{5q}{9} - \frac{qx^2}{4};\ M(x) = \frac{5qx}{9} - \frac{qx^3}{12}$$

$$\frac{dM(x)}{dx} = V(x) = 0 \rightarrow x_{max} \rightarrow \frac{5q}{9} - \frac{qx^2}{4} = 0 \rightarrow x = \sqrt{\frac{20}{9}} = \frac{2\sqrt{5}}{3}\ \text{m}$$

$$M_{max} = \frac{5q}{9}\left(\frac{2\sqrt{5}}{3}\right) - \frac{q}{12}\left(\frac{2\sqrt{5}}{3}\right)^3 = \frac{5q}{9}\left(\frac{2\sqrt{5}}{3}\right) - \frac{q}{12}\left(\frac{2\sqrt{5}}{3}\right)\left(\frac{2.2.5}{9}\right) = \frac{5q}{9}\left(\frac{2\sqrt{5}}{3}\right)\left(1-\frac{4}{12}\right) = \frac{5q}{9}\left(\frac{2\sqrt{5}}{3}\right)\left(\frac{2}{3}\right)$$

$$M_{max} = 5\ \text{kN.m} = \frac{5q}{9}\left(\frac{2\sqrt{5}}{3}\right)\left(\frac{2}{3}\right) \rightarrow q = 9\left(\frac{3}{2\sqrt{5}}\right)\left(\frac{3}{2}\right) = \frac{81}{4\sqrt{5}} \rightarrow \boxed{\mathbf{q = 9,08\ kN/m}}$$