

[Answers:](#)

$$\text{b) } u_{x;b} = \frac{45Fa^3}{EI}$$

$$\text{c) } u_{x;e} = -\frac{3aF}{EA\sqrt{2}}$$

$$\text{d) } u_x = \frac{45Fa^3}{EI} - \frac{3aF}{EA\sqrt{2}}$$

$$\text{e) } \frac{u_{x;e}}{u_{x;b}} = 500\sqrt{2}b$$