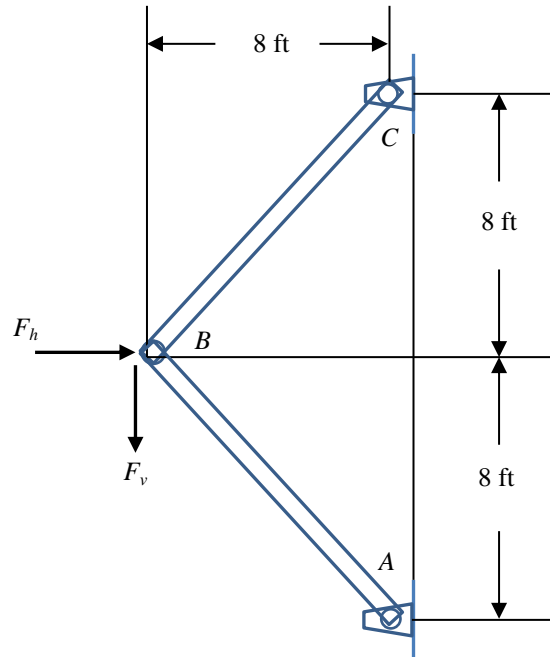


14. Determine the distributions of forces at pins A and C if the vertical and horizontal forces applied on B are independently and normally distributed with $F_v \sim N(15, 1^2)$ N and $F_h \sim N(25, 2^2)$ N, respectively. Neglect the weight of all the members.



Answer

$$F_{BA} \sim N(28.28, 1.58^2) \text{ N}, F_{BC} \sim N(7.07, 1.58^2) \text{ N}.$$