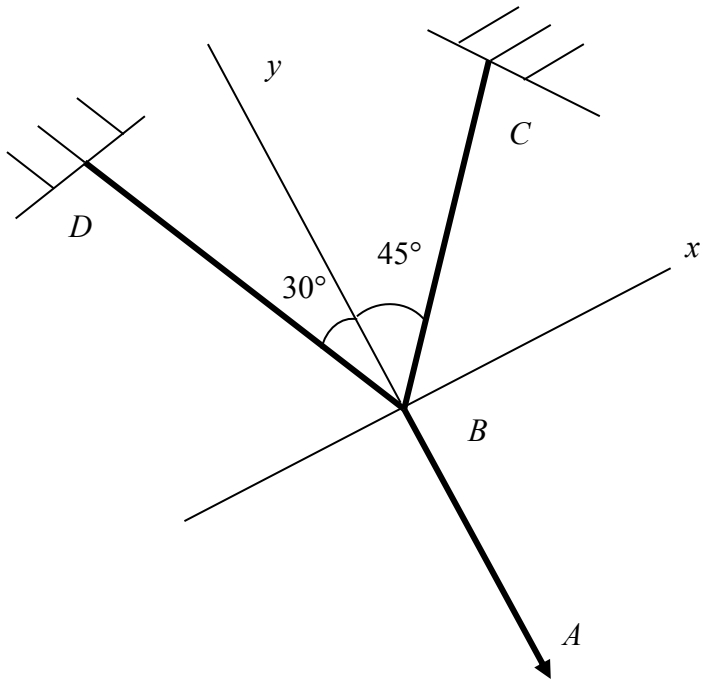


4. If  $F_{AB} \sim N(450, 8^2)$  N, determine the distributions of  $F_{BC}$  and  $F_{BD}$ .



Solution: The distributions are  $F_{BD} \sim N(329.42, 5.86^2)$  N and  $F_{BC} \sim N(232.94, 4.14^2)$  N. **ANS.**