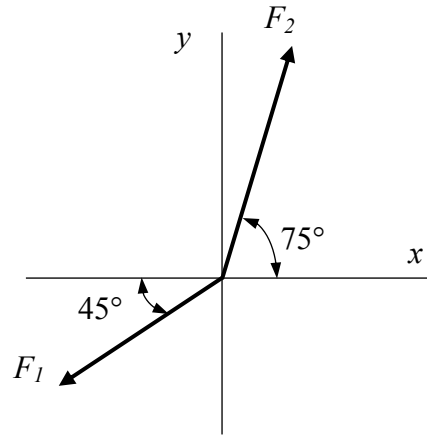


14. Two forces are independently and normally distributed with $F_1 \sim N(1800, 100^2)$ N and $F_2 \sim N(1500, 70^2)$ N, respectively. Determine the resultant forces in x and y axes.



Solution: $F_x \sim N(-884.6, 73^2)$ N and $F_y \sim N(176.1, 97.8^2)$ N.