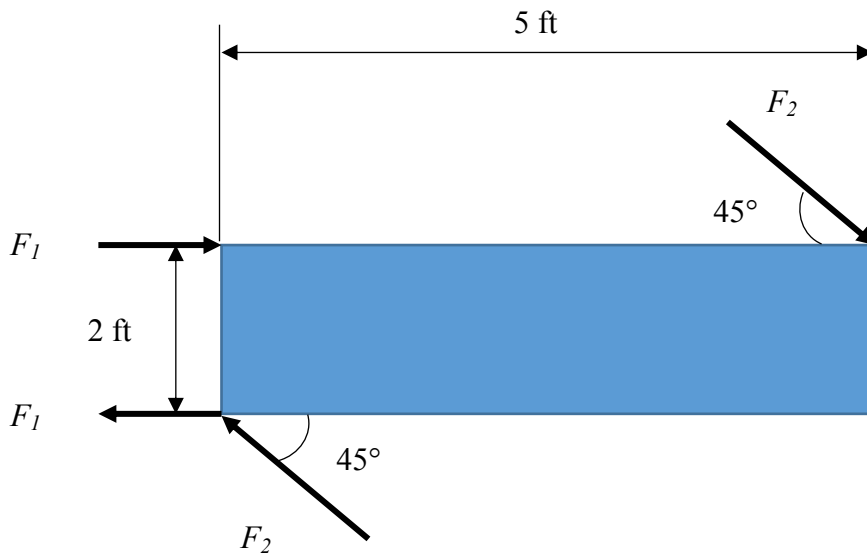


5. Two couples acting on the beam are independently and normally distributed with $F_1 \sim N(350, 10^2)$ lb and $F_2 \sim N(500, 15^2)$ lb. Determine the distribution of the resultant couple moment.



Solution: The resultant moment is $M \sim N(3174.9, 60.5^2)$ lb · ft .