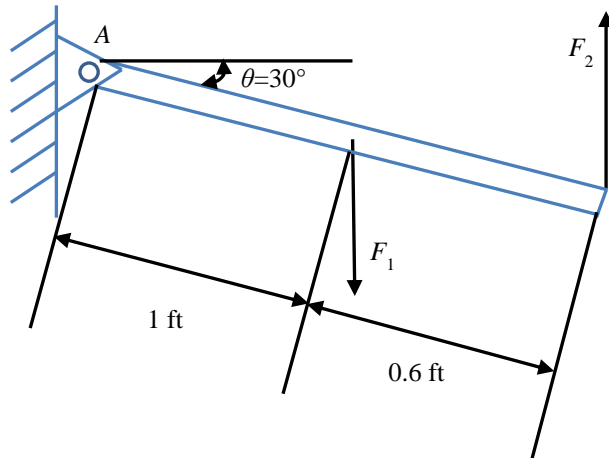


8. The rod is subjected to two independently and normally distributed forces $F_1 \sim N(50, 1.5^2)$ lb and $F_2 \sim N(20, 1^2)$ lb and is pinned at A. Determine the distribution of the moment at A for equilibrium.



Answer

The distribution of moment at A is $W_A \sim N(-15.6, 1.9^2)$ lb/ft.