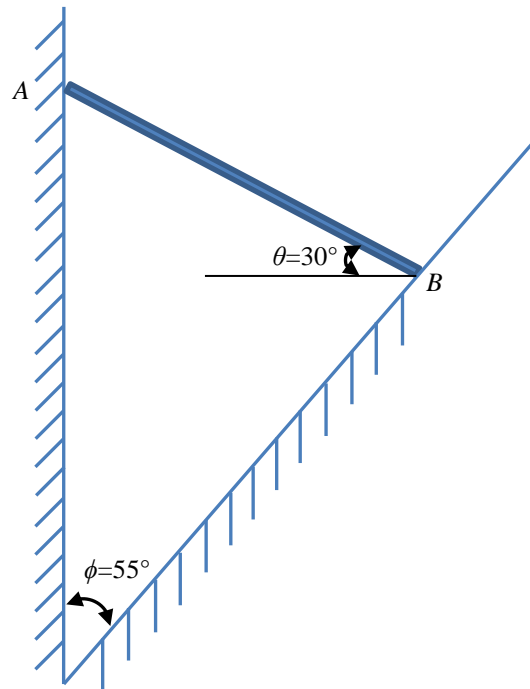10. A uniform rod is placed along the vertical surface at A and on the smooth surface at B. If the rod has a weight of $W \sim N(30,0.2^2)$ lb and the coefficient of friction at A is $\mu_s = 0.5$, determine the distributions of normal forces at A and B.

Answer

$N_A \sim N(15.56, 0.0259^2)$ lb and $N_B \sim N(27.13, 0.0452^2)$ lb .