

8-6. Square columns are used to support a roof. The ends of a column are pin connected. The dimension of the column is shown below. If the modulus of elasticity follows a normal distribution $E \sim N(1.5 \times 10^3, 120^2)$ ksi, determine the distribution of the critical load of the column. Assume that Euler's formula is valid. (Ans. $P_{cr} \sim N(6.42, 0.51^2)$ kip)

