Supplemental Warm-ups for Section 7.2

Supp 1: If $X_1, X_2, \ldots, X_n$ denote a random sample from the normal distribution with known mean $\mu = 0$ and unknown variance σ^2, find the method of moments estimator of σ^2.

Supp 2: Let $X_1, X_2, \ldots, X_n$ denote independent and identically distributed uniform random variables on the interval $(0, 3\theta)$. Derive the method of moments estimator for θ.