

Quiz 11

ECEn 370

Name: _____

1. Let $X \sim U(-1,1)$. What is its third central moment, m_3 ?

Due to symmetry, $m_3 = 0$. Or,

$$m_3 = \int_{-1}^1 (x - \mu_x)^3 f_X(x) dx = \frac{1}{2} \int_{-1}^1 (x)^3 dx = \frac{1}{2} \frac{1}{4} x^4 \Big|_{-1}^1 = 0$$