

74. Use Stein's Lemma to find an expression for the fourth-moment of the normal distribution  
Stein's Lemma: Let  $X \sim N(\theta, \sigma^2)$  and  $g$  be a differentiable function satisfying  $E[|g'(X)|] \leq \infty$ . Then

$$E[g(X)(X - \theta)] = \sigma^2 E[g'(x)]$$