

MT202 Homework 10

Due Tuesday, November 22, 2011

12.5: 14, 20, 28, 54, 56

12.6 12, 14, 16, 18 (Set up the integrals for these four only!), 34

Joint probability density function problems:

A. Suppose X and Y have joint pdf $f(x, y) = \frac{3}{8}x^2$, $0 \leq x \leq 2$, $0 \leq y \leq 4$. Find $P(X+Y \leq 1)$.

B. Let X and Y have joint pdf $f(x, y) = 4xy$, $0 \leq x \leq 1$, $0 \leq y \leq 1$.
Find $P(3X + 2Y \leq 1)$.

12.8: 2, 4, 25, 26, 31, 32, 39