

MATH 5010 – Quiz

Name:

6.9 The joint probability density function of X and Y is given by

$$f(x, y) = \begin{cases} \frac{6}{7} \left(x^2 + \frac{xy}{2} \right) & x \in (0, 1), y \in (0, 2) \\ 0 & \text{otherwise.} \end{cases}$$

Find $P(X < Y < X + 1)$.