Practice worksheet | Continuous probability and normal distributions

Probability density functions and total area

Name: _____ Date: _____

6 questions | 12 marks

1. Is $f(x) = 0.8$ on $[0, 2]$ a density? Explain. [2 marks]

2. Find k if $f(x) = kx$ on $[0, 3]$ is a density. [2 marks]

3. Check both conditions for $f(x) = 3x^2$ on $[0, 1]$. [2 marks]

4. For any continuous density, find $P(X = 0.7)$. [2 marks]

5. A nonnegative triangular density has width 1 and height 2. Is its area correct? [2 marks]

6. A function has integral one but is negative on part of its support. Is it a density? [2 marks]