Practice worksheet | Continuous probability and normal distributions

Cumulative distribution functions

Name: _____ Date: _____

6 questions | 14 marks

1. For CDF x^2 on $[0, 1]$, find $P(0.4 < X < 0.8)$. [2 marks]

2. Give the CDF of density $3x^2$ on $[0, 1]$ over the whole real line. [3 marks]

3. Find the 90th percentile for CDF x^2 on $[0, 1]$. [2 marks]

4. Can a CDF decrease from 0.6 to 0.5 as x increases? Explain. [2 marks]

5. X is uniform on $[4, 10]$. Find $F(2)$ and $F(12)$. [2 marks]

6. For CDF $1-(1-x)^2$ on $[0, 1]$, find the density and median. [3 marks]