Practice worksheet | Continuous probability and normal distributions

Mean, variance and standard deviation for continuous models

Name: _____ Date: _____

6 questions | 14 marks

1. For density $3x^2$ on [0,1], find E(X). [2 marks]

2. For density $3x^2$ on [0,1], find E(X squared) and variance. [3 marks]

3. Find the mean and variance of a uniform variable on [0,6]. [2 marks]

4. For E(X)=2/3 and Var(X)=1/18, find the mean and variance of $5 - 2X$. [2 marks]

5. A length has variance 0.04 square metres. Find its standard deviation. [2 marks]

6. For density 1/2 on [-1,1], find mean and variance. [3 marks]