Practice worksheet | Discrete probability distributions

Binomial probabilities and cumulative probabilities

Name: _____ Date: _____

6 questions | 12 marks

1. $X \sim \text{Bin}(4, 1/2)$. Find P(X = 2). [2 marks]

2. $X \sim \text{Bin}(3, 0.2)$. Find P(X = 0). [2 marks]

3. $X \sim \text{Bin}(4, 0.1)$. Find P(X ≥ 1). [2 marks]

4. $X \sim \text{Bin}(5, 1/2)$. Find $P(X \leq 1)$. [2 marks]

5. $X \sim \text{Bin}(4, 1/2)$. Find $P(1 \leq X \leq 3)$. [2 marks]

6. $X \sim \text{Bin}(10, 0.3)$. Write a cumulative-probability expression for $P(3 \leq X \leq 7)$. [2 marks]