Practice worksheet | Discrete probability distributions

Bernoulli trials

Name: _____ Date: _____

6 questions | 15 marks

1. A coin lands heads with probability 0.55. Define a Bernoulli indicator for tails and give p. [2 marks]

2. B is Bernoulli with p = 0.4. Find E(B), Var(B) and SD(B). [3 marks]

3. Let B be Bernoulli with p = 0.1. A bonus is Y = 20B dollars. Find its mean and variance. [3 marks]

4. If B is Bernoulli with p = 1, describe B and find its variance. [2 marks]

5. A variable equals 2 or 7. Explain how a Bernoulli variable B can represent it. [2 marks]

6. Show that a Bernoulli variance cannot exceed 1/4. [3 marks]