Practice worksheet | Probability

# Replacement and dependence

Name: _____ Date: _____

6 questions | 14 marks

**1.** A bag has 4 green and 3 yellow. After drawing a green without replacement, find the next green chance. [2 marks]

**2.** A bag has 4 green and 3 yellow counters. Two counters are drawn at random with replacement. Find $P(\text{two green})$. [2 marks]

**3.** A bag has 4 green and 3 yellow counters. Two counters are drawn at random without replacement. Find $P(\text{two yellow})$. [2 marks]

**4.** $P(A) = 0.3$, $P(B) = 0.6$ and $P(A \cap B) = 0.18$. Test independence. [2 marks]

**5.** $P(A) = 0.5$, $P(B) = 0.4$ and $P(A \cap B) = 0.3$. Find $P(A \mid B)$ and test independence. [3 marks]

**6.** Two fair coin tosses are independent. Does a first head make a second tail “due”? Explain. [3 marks]