Practice worksheet | Probability

With/without replacement

Name: _____ Date: _____

6 questions | 14 marks

1. A bag has 4 red and 2 blue counters. One counter is drawn at random and is red. After it is removed, find the next-blue probability. [2 marks]

2. The bag has 4 red and 2 blue counters. Draw twice at random, replacing and mixing after the first draw. Find $P(\mathrm{RR})$. [2 marks]

3. A bag has 4 red and 2 blue counters. Draw twice at random without replacement. Find $P(\mathrm{RR})$. [2 marks]

4. A bag has 3 black and 1 white counter. Draw twice at random without replacement. Find $P(\text{one of each})$. [3 marks]

5. Two cards are chosen without replacement from cards labelled 1, 2, 3. List all ordered outcomes. [2 marks]

6. A bag has 5 red and 3 blue counters. Is $P(\text{RR})$ greater with or without replacement? Explain. [3 marks]