2.71 Probability Depth: 10-minute Pack

GL ASSESSMENT EP.M94 · Calculators not allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A fair coin is flipped once. What is the probability that it lands on tails? Give your answer as a fraction.

(1)

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2 A spinner was spun 50 times. It landed on red 14 times, blue 21 times and green the rest of the time. Estimate the probability that the spinner lands on green.

(3)

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3 A number is picked at random from the whole numbers 1 to 25 inclusive. What is the probability that the number is NOT a multiple of 4?

(2)

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4 Two fair six-sided dice are rolled and their scores are added together. Find the probability that the total is 7.

(3)

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5 A bag contains only red, blue and green counters. The probability of picking a red counter is 1/3 and the probability of picking a blue counter is 1/4. There are 10 green counters in the bag. How many counters are there in the bag altogether?

(4)

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Mark scheme · 2.71 Probability Depth: 10-minute Pack

Question 1

1/2 cao	**B1**

Answer: 1/2

Question 2

14 + 21 = 35 (times the spinner landed on red or blue)	**M1**
50 - 35 = 15 (times the spinner landed on green)	**M1**
3/10 cao	**A1**

Answer: 3/10

Question 3

identifies 6 multiples of 4 from 1 to 25: 4, 8, 12, 16, 20, 24 (oe)	**M1**
19/25 cao	**A1**

Answer: 19/25

Question 4

recognises there are 6 x 6 = 36 equally likely outcomes in total (oe)	**M1**
lists the 6 combinations that give a total of 7: (1,6), (2,5), (3,4), (4,3), (5,2), (6,1) (oe)	**M1**
1/6 cao	**A1**

Answer: 1/6

Question 5

1/3 + 1/4 = 7/12 (probability of red or blue)	**M1**
1 - 7/12 = 5/12 (probability of green)	**M1**
sets up 5/12 of the total = 10 (oe)	**M1**
24 cao	**A1**

Answer: 24

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