GCSE FOUNDATION · REVISION MAT 4

Sample space diagrams

1 Two spinners are used and the total is recorded.

Complete the sample space diagram.

+	1	2	3	4	5
1	2	3	4	5	6
2		4	5		7
3	4	5		7	8

2 Two spinners are used and the total is recorded.

+	1	2	3	4	5
1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8

Find the probability that the total is 5.

3 Two spinners are used and the total is recorded.

+	1	2	3	4	5
1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8

Explain why a total of 5 is more likely than a total of 2.

4 Two spinners are used and the total is recorded.

+	1	2	3	4	5
1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8

Show that P(total is greater than 5) = $\frac{2}{5}$

5 Spinner A has numbers 0, 1, 2.
Spinner B has numbers 1, 2, 3, 4.
Ella wins if the total is odd.

Work out the probability that Ella wins.

6 A coin is flipped and a 8-sided dice is rolled.

(a) How many outcomes are there?

(b) Find P(tails and a multiple of 3).

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Sample space diagrams

1

+	1	2	3	4	5
1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8

2 3 out of 15

$\frac{1}{5}$

3 5 appears **3** times in the diagram, 2 appears only **1** time.

4 6 out of 15 outcomes

$\frac{6}{15} = \frac{2}{5}$ ✓

5

+	1	2	3	4
0	1	2	3	4
1	2	3	4	5
2	3	4	5	6

6 out of 12: $\frac{1}{2}$

6 (a) $2 \times 8 = 16$

(b) 2 out of 16: $\frac{1}{8}$

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