

KS3 – Combined Events – Answers

Section A – Sample Spaces

Q1

- a) 12
- b) (H, 4)
- c) $1/12$
- d) $3/12 = 1/4$

Q2

Table outcomes: AH, AT; BH, BT; CH, CT.

- a) $1/6$
- b) $2/6 = 1/3$
- c) $3/6 = 1/2$
- d) $1/6$

Q3

Completed sums:

2,3,4,5
3,4,5,6
4,5,6,7
5,6,7,8

- a) $4/16 = 1/4$
- b) $1/16$
- c) $6/16 = 3/8$
- d) $3/16$

Q4

- a) 36
- b) 6
- c) $6/36 = 1/6$
- d) $1/36$
- e) $2/36 = 1/18$

Section B – Listing Outcomes

Q5

- a) CW, CJ, TW, TJ, HW, HJ
- b) 6
- c) $1/6$

Q6

- a) 14, 15, 16, 24, 25, 26, 34, 35, 36
- b) 9
- c) $1/9$
- d) $3/9 = 1/3$

Q7

- a) HH, HT, TH, TT
- b) $1/4$
- c) $2/4 = 1/2$
- d) $3/4$
- e) $1/4$

Q8

- a) RR, RB, RG, BR, BB, BG, GR, GB, GG
- b) $1/9$
- c) $3/9 = 1/3$
- d) $5/9$
- e) Order matters: RB means red first then blue; BR means blue first then red.

Q9

- a) 9
- b) Music–Apple, Music–Banana, Music–Yogurt
- c) $1/9$
- d) $3/9 = 1/3$
- e) $6/9 = 2/3$

Q10

- a) 123, 132, 213, 231, 312, 321
- b) 6
- c) $2/6 = 1/3$
- d) $2/6 = 1/3$
- e) $2/6 = 1/3$

