

2 Probability of Two or More Events

Answers

2

10. (a) $\frac{1}{5}$ (b) $\frac{2}{5}$ (c) AX, AY, AZ, BW, BX, BY, BZ, CW, CX, CY, CZ, DW, DX, DY, DZ, EW, EX, EY, EZ

11. (b) $\frac{1}{8}$

12. (b) $\frac{4}{9}$

3 Use of Tree Diagrams

1. (b) $0.6 \times 0.6 = 0.36$; $0.6 \times 0.4 = 0.24$; $0.4 \times 0.6 = 0.24$; $0.4 \times 0.4 = 0.16$
 (c) 0.16 (d) 0.36 (e) 0.48

2. (a) $\frac{1}{6}$ (c) (i) $\frac{1}{36}$ (ii) $\frac{5}{18}$ (iii) $\frac{25}{36}$

3. (a) $\frac{1}{4}$ (b) $\frac{1}{4}$ (c) $\frac{1}{2}$

4. (a) $\frac{81}{100}$ (b) $\frac{99}{100}$ (c) $\frac{1}{100}$

5. (a) $\frac{1}{4}$ (c) (i) $\frac{9}{16}$ (ii) $\frac{3}{8}$ (iii) $\frac{1}{16}$

6. (b) (i) 0.54 (ii) 0.36 (iii) 0.04

7. (a) (i) 0.2 (ii) 0.4 (b) (i) 0.48 (ii) 0.08

8. (a) (i) 0.2704 (ii) 0.2304 (iii) 0.4992 (b) (iii)

9. (a) 0.56 (b) 0.38 (c) 0.04 (d) 0.64

10. (a) $\frac{7}{18}$ (b) $\frac{1}{36}$ (c) $\frac{1}{4}$

11. (b) (i) $\frac{1}{4}$ (ii) $\frac{1}{2}$ (iii) $\frac{3}{8}$

12. (b) 0.52

13. (a) $\frac{7}{13}$ (b) $\frac{43}{91}$

14. (b) $\frac{3}{14}$

15. (a) 0.6 (b) 0.16

16. (a) $\frac{1}{216}$ (b) $\frac{5}{216}$ (c) $\frac{5}{72}$ (d) $\frac{2}{27}$