

M Doran March '08

a) A bag contains 6 black balls and 12 white balls. If a ball is picked at random what is the probability that it will be black?

b) A bag has 3 red sweets, 6 green sweets and 9 blue sweets. If a sweet is picked at random what is the probability that it will be
i) Red ii) Green iii) Blue iv) Orange

c) A dice numbered from 1 to 6 is rolled.

i) What is the probability that it will show a 2?

ii) What is the probability of it showing a 3

iii) What is the probability of it showing an odd number?

iv) What is the probability that is will show the number 8.

| Answers. | |
|----------|---|
| 1 | a) 10 b) 15 c) 0.5 d) 35 e) 12.7 |
| 2 | a) 5 b) 15 c) 1.7 d) 153 e) 7.5 f) 8.5 g) 7 |
| 3 | a) 13 b) 2.1 c) 1 d) 124 |
| 4 | a) 8 b) 18 c) 1.4 d) 108 e) 7 f) 14 g) 8 h) 43 i) 4.6 j) 1 k) 189 |
| 5 | a) $\frac{6}{12} = \frac{1}{2}$ b) |

$$\frac{1}{2}$$

i) $\frac{3}{18} = \frac{1}{6}$
ii) $\frac{6}{18} = \frac{1}{3}$
iii) $\frac{9}{18} = \frac{1}{2}$
iv) 0

c) i)
$$\frac{1}{6}$$

ii) $\frac{1}{6}$
iii) $\frac{3}{6} = \frac{1}{2}$
iv) 0