Probability

Workout

Question 1:

(a) $\frac{3}{5}$ (b) $\frac{2}{5}$

Question 2:

(a) $\frac{1}{12}$ (b) $\frac{5}{12}$ (c) $\frac{6}{12} = \frac{1}{2}$

Question 3:

(a) $\frac{1}{9}$ (b) $\frac{4}{9}$ (c) $\frac{6}{9} = \frac{2}{3}$

(d) $\frac{2}{9}$ (e) $\frac{3}{9} = \frac{1}{3}$ (f) $\frac{4}{9}$

Question 4:

(a) $\frac{3}{20}$ (b) $\frac{15}{20} = \frac{3}{4}$ (c) $\frac{8}{20} = \frac{2}{5}$

Question 5: 0.6

Question 6: 0.2

Question 7: 0.17

Question 8:

(a) $\frac{15}{80} = \frac{3}{16}$ (b) $\frac{65}{80} = \frac{13}{16}$

Question 9:

$$\frac{2}{20} + \frac{13}{20} = \frac{15}{20} = \frac{3}{4}$$

Question 10:
   (a)   0.2
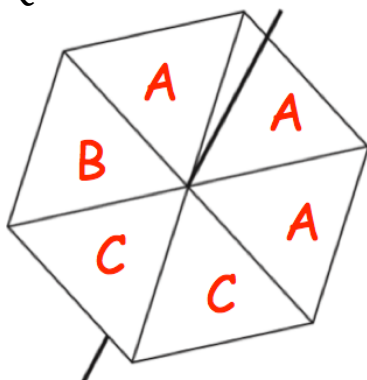   (b)   8

Question 11:   0.25

Question 12:
$$\frac{695}{700} = \frac{139}{140}$$

Question 13:   12

Question 14:   273

Apply
Question 1:

Question 2:

Question 3:

(a)

	Under 20 driving lessons	20 or over driving lessons	total
Pass	9	21	30
Fail	45	15	60
total	54	36	90

(b) $\frac{60}{90} = \frac{2}{3}$

(c) $\frac{54}{90} = \frac{27}{45}$

(d) $\frac{9}{30} = \frac{3}{10}$

Question 4:

Spinner 1 probability for landing on 4 is $\frac{2}{10} = \frac{1}{5}$ whilst spinner 2's probability is $\frac{1}{4}$ which is a higher probability.

Question 5:

(a) $\frac{4}{23}$

(b) $\frac{18}{23}$

Question 6:   80 points

Question 7:   0.45

Question 8:   8

Question 9:   Two 1ps, four 2ps and four 10ps

Question 10:

    (a)   0.1
    (b)   75

Question 11:
    (a)   n+5

    (b) $\dfrac{n}{n+5}$

    (c) $\dfrac{5}{n+5}$

Question 12: $\dfrac{3}{4}$ or 0.75