



Probability Exam Practice

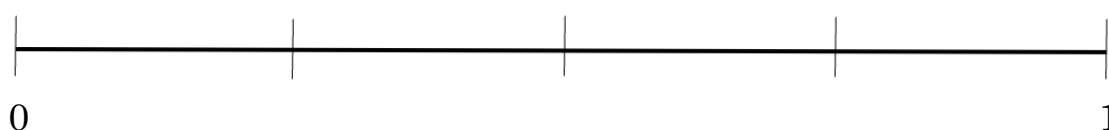
Q1. David chooses a number at random between 1 and 12 inclusive.
Mark on the probability scale the events A, B, C and D where:

A is choosing an odd number

B is choosing a multiple of 15

C is choosing a prime number greater than 3

D choosing a number less than 10



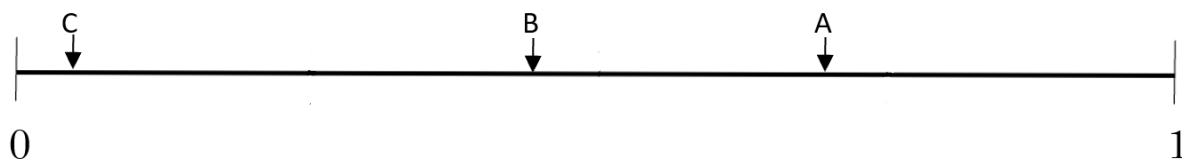
Answer: _____
(4 marks)

Q2. A fair dice, numbered 1 to 6 in the usual way, is thrown. Work out the probability that a square number is rolled.

Answer: _____
(2 marks)



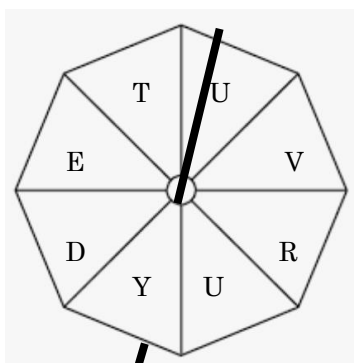
Q3. Estimate the probability of each of the events A, B and C from the probability scale below:



Answer: _____
(3 marks)



Q4. In the English language, a vowel is any of the letters A, E, I, O, or U.



Work out the probability that the spinner lands on:

- (i) an E
- (ii) any letter which is not a vowel
- (iii) the letter A

Answer: _____

(3 marks)



Q5. The weather news on channel A states the probability of it snowing the next day is 35%, whereas the weather news on channel B states that the probability is $\frac{2}{5}$. Which channel thinks it is the least likely to snow? You must show your reasoning.

Answer: _____
(2 marks)



Q6. Here is a list of numbers:

2, 4, 5, 8, 4, 3, 0, 10, 15, 18, 7, 14

A number is chosen at a random from the list, find the probability that it is:

(a) an even number

Answer: _____
(1 mark)

(b) a number less than 4

Answer: _____
(1 mark)

(c) a prime number

Answer: _____
(1 mark)



Q7. A box contains 18 crayons. 6 are black, 3 are red, the rest are green.
Work out the probability that a randomly selected crayon is:

a) green

Answer: _____
(1 mark)

b) not black

Answer: _____
(1 mark)



Q8. At a Christmas raffle, a total of 200 tickets are sold some of which will win the buyer a prize. The prizes on offer are three £25 prizes, two £50 prizes and one £100 prize. What is the probability that:

a) the buyer wins a £50 prize?

Answer: _____
(2 marks)

b) the buyer does not win anything?

Answer: _____
(2 marks)



Q9. There are red, green, blue and purple counters in a bag. A counter is picked at random from the bag. There are seven times as many purple counters as red counters in the bag.

a) Complete the probability table shown below:

Colour	Red	Green	Blue	Purple
Probability		0.1	0.3	

Answer: _____

(2 marks)

b) Work out the probability of not choosing a blue counter.

Answer: _____

(1 mark)

c) Rob counts all the counters in the bag and claims that there are 24 counters. Explain why this cannot be true.

Answer: _____

(1 mark)