

**QUESTION**

1. The following table shows the results of a survey of 100 people regarding their preferred mode of transport to work. The table is partially filled in.

Mode of Transport	Number of People
Car	45
Bus	30
Cycling	15
Walking	10
Other	5

2. A box contains 100 balls, numbered 1 to 100. A ball is chosen at random. Find the probability that the number on the ball is:

(a) a multiple of 5

(b) a multiple of 10

(c) a multiple of 20

(d) a multiple of 25

(e) a multiple of 50

(f) a multiple of 100

(g) a prime number

(h) a composite number

(i) a square number

(j) a cube number

(k) a number which is both a square and a cube

(l) a number which is neither a square nor a cube

(m) a number which is both a square and a cube and is not a multiple of 10

(n) a number which is neither a square nor a cube and is not a multiple of 10

(o) a number which is both a square and a cube and is a multiple of 10

(p) a number which is neither a square nor a cube and is a multiple of 10

(q) a number which is both a square and a cube and is a multiple of 100

(r) a number which is neither a square nor a cube and is a multiple of 100

(s) a number which is both a square and a cube and is not a multiple of 100

(t) a number which is neither a square nor a cube and is not a multiple of 100

(u) a number which is both a square and a cube and is a multiple of 1000

(v) a number which is neither a square nor a cube and is not a multiple of 1000

(w) a number which is both a square and a cube and is a multiple of 1000

(x) a number which is neither a square nor a cube and is a multiple of 1000

(y) a number which is both a square and a cube and is not a multiple of 1000

(z) a number which is neither a square nor a cube and is not a multiple of 1000

**ANSWERS**

1. (a) 45/100 = 0.45

(b) 30/100 = 0.3

(c) 15/100 = 0.15

(d) 10/100 = 0.1

(e) 5/100 = 0.05

2. (a) 20/100 = 0.2

(b) 10/100 = 0.1

(c) 5/100 = 0.05

(d) 4/100 = 0.04

(e) 2/100 = 0.02

(f) 1/100 = 0.01

(g) 16/100 = 0.16

(h) 84/100 = 0.84

(i) 10/100 = 0.1

(j) 4/100 = 0.04

(k) 2/100 = 0.02

(l) 86/100 = 0.86

(m) 2/100 = 0.02

(n) 88/100 = 0.88

(o) 2/100 = 0.02

(p) 88/100 = 0.88

(q) 2/100 = 0.02

(r) 88/100 = 0.88

(s) 2/100 = 0.02

(t) 88/100 = 0.88

(u) 2/100 = 0.02

(v) 88/100 = 0.88

(w) 2/100 = 0.02

(x) 88/100 = 0.88

(y) 2/100 = 0.02

(z) 88/100 = 0.88

## EXERCISE 10

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