

Question 1

Five years ago, mother was three times older than daughter. Ten years later, mother will be twice as old as daughter. How old are daughter and mother now (in years)?

Options:

1. (25, 55)
2. (20, 50)
3. (25, 50)
4. (20, 55)

Answer: (4) (20, 55)

Question 2

The area of a rectangle gets reduced by 40 square units. If its length is reduced by 7 units and breadth is increased by 2 units. If we increase the length by 4 units and breadth by 4 units, then the area is increased by 108 square units. Then the length and breadth of the rectangle is

Options:

1. 8 units and 15 units respectively
2. 12 units and 15 units respectively
3. 15 units and 8 units respectively
4. 15 units and 12 units respectively

Answer: (4) 15 units and 12 units respectively

Question 3

There are four consecutive odd numbers (x_1, x_2, x_3, x_4) , and three consecutive even numbers (y_1, y_2, y_3) . The average of odd numbers is 12 less than the average of even numbers. If the sum of three even numbers is 32 less than the sum of four odd numbers, then the average of (x_1, x_2, x_3, x_4) is

Options:

1. 60
2. 64
3. 62
4. 68

Answer: (3) 62

Question 4

There is a list of a hospital with admitted patients by age for one day. There were 1000 patients attended. Among these patients, children below 5 years were 600; 200 were between the age of 5 years and 45 years and 200 were above 45 years. Then the proportion of patients attended by the hospital to be of age less than five years and adults of 45 years and above is

Options:

1. 0.60

2. 0.20
3. 0.80
4. 0.40

Answer: (3) 0.80

Question 5

A class of 40 students showed that 20% were taller, 40% were shorter and 40% were shortest. Then the probability that the students are either taller or shortest is _____

Options:

1. 0.60
2. 0.40
3. 0.20
4. 0.80

Answer: (4) 0.80

Question 6

In a certain college in Andhra Pradesh there were 800 students. Among them 320 were normals, 200 with anaemia, 160 with B-complex deficiency and 120 with Vitamin A deficiency. Complete the following table.

Statements:

(i) $A = 40, B = 15, C = 20, a = 160, b = 200$

(ii) $a = 100, b = 200, a_1 = 0.2, b_1 = 0.25$

(iii) $A = 40, B = 15, C = 20, a_1 = 0.25, b_1 = 0.2$

(iv) $A = 40, B = 20, C = 15, a = 100, b = 200$

Options:

1. Statements (i) and (ii) are correct
2. Statements (i) and (iii) are correct
3. Statements (ii) and (iv) are correct
4. Statements (iii) and (iv) are correct

Answer: (2) Statements (i) and (iii) are correct

Question 7

Consider the following statements:

- (i) If you add 9 to each entry on a list that adds 9 to the average.
- (ii) If you add 9 to each entry that adds 9 to the standard deviation.
- (iii) If you double each entry on a list that doubles the average.
- (iv) If you double each entry on a list that doubles the standard deviation.

Which of the following is correct?

Options:

1. Statements (i) and (ii) are correct
2. Statements (ii) and (iii) are correct
3. Statements (iii) and (iv) are correct
4. Statements (ii) and (iv) are correct

Answer: (3) Statements (iii) and (iv) are correct