Time Taken = 49 Minutes Score = 44/44 Very Very Important DHA Do Again

# Udaan 2025 Maths

**DHA: 5** 

# Pair of Linear Equations in Two Variables

	Q 1	A man has Rs. 100 in Rs. 1 coins and 50 paise coins.		
		All the 50 paise coins are worth as much as all the Rs.		
. (	Q	1 coins. How many coins of each he has?		

(A) Rs. 1 coins = 50, 50 paise coins = 100

(B) Rs. 1 coins = 75, 50 paise coins = 100

(C) Rs. 1 coins = 100, 50 paise coins = 200

(D) Rs. 1 coins = 150, 50 paise coins = 200

Q 2 A mother is five times as old as her daughter. Five years later, the mother will be three times as old as her daughter. Find the sum of their present ages in years.

(A) 25

V.V.I.P

**(B)** 30

(C) 40

**(**D) 35

Q 3 Taxi charges consist of fixed charges and remaining depending upon the distance travelled in kilometers. If a person, travels 12 km, he pays Rs. 45 and for travelling 20 km, he pays Rs. 73. Find the fixed charges and the rate per km.

(A) Rs. 4, Rs. 4.50

(B) Rs. 4, Rs. 3.50

(C) Rs. 3, Rs. 3.50

(D) Rs. 3, Rs. 3.80

Q 4 A man has only 20 paisa coins and 25 paisa coins in his purse. If he has 50 coins in all totaling Rs. 11.25, how many coins of each kind does he have?

(A) 20 coins of each kind

(B) 24 coins of each kind

(C) 25 coins of each kind

(D) 22 coins of each kind

Q 5 Ten years ago, a father was twelve times as old as his son and ten years hence, he will be twice as old as son will be then. Find their present ages.

V.V.I.P.Q

(A) Father's age - 34 years, Son's age - 12 years

(B) Father's age - 54 years, Son's age - 15 years

(C) Father's age - 44 years, Son's age - 16 years

(D) Father's age - 64 years, Son's age - 10 years

Q 6 Two years ago, a father was five times as old as his son. Two years later, his age will be 8 more than three times the age of the son. Find the present ages of the father and son.

(A) Father's age - 34 years, Son's age - 8 years

(B) Father's age - 40 years, Son's age - 12 years

(C) Father's age - 42 years, Son's age - 10 years

(D) Father's age - 47 years, Son's age - 19 years

The ratio of incomes of two persons is 9 : 7 and the ratio of their expenditure is 4 : 3. If each of them manages to save Rs. 2000 per month, then find the V.V.I.P.Q monthly incomes. Form a pair of linear equations from the above data and by elimination method, the value of monthly incomes are

(A) 18000, 14000

(B) 20000, 12000

(C) 22000, 10000

(D) None of above

Aruna has only Rs. 1 and Rs. 2 coins with her. If the total number of coins that she has is 50 and the amount of money with her is Rs. 75, then the number of Rs. 1 and Rs. 2 coins is

(A) 24, 25

(B) 25, 25

(C) 26, 26

(D) None of these

Q 9 From a bus stand in Delhi, if we buy 2 tickets to Pitampura and 3 tickets to Dilshad Garden, the total cost is Rs. 46 but if we buy 3 tickets to Pitampura and 5 tickets to Dilshad Garden, the total cost is Rs. 74. Then, the fares from the bus stand to Pitampura and to Dilshad Garden is

(A) Rs.8; Rs. 100

(B) Rs.10; Rs. 8

(C) Rs.8; Rs. 10

(D) Rs.20; Rs. 5

**Q 10** If the angles of a triangle are x,y and 40° and the difference between the two angles x and y is 30°. Then, the values of x and y is 85° and 55° respectively.

(A) True

(B) False

(C) Can't say

(D) Partially true/false

**Q 11** The area of a rectangle increase by 76 sq. units, ifthe length and breadth is increased by 2 units. However, if the length is increased by 3 units and breadth is decreased by 3 units, the area of rectangle reduced by 21 sq. units. Find the breadth of the rectangle.

(A) 9 units

(B) 16 units

(C) 18 units

(D) 21 units

# **Answer Key**

Q1	A	
$\mathbf{Q}2$	В	
$\mathbf{Q3}$	C	
Q4	C	
<b>Q</b> 5	A	
<b>Q6</b>	C	

Q7 A
Q8 B
Q9 C
Q10 A
Q11 B



# **Hints & Solutions**

# Q 1 Text Solution:

Rs. 1 coins = 50, 50 paise coins = 100

#### **Video Solution:**



# Q 2 Text Solution:

30

#### **Video Solution:**



#### Q 3 Text Solution:

Rs. 3, Rs. 3.50

#### **Video Solution:**



# **Q 4** Text Solution:

Let number of 20 paisa coins be x and number of 25 Paisa coins be y.

## **Video Solution:**



## **Q** 5 Text Solution:

Let their present ages be x and y.

# **Video Solution:**



# Q 6 Text Solution:

Let their present ages be x and y.

#### **Video Solution:**



# **Q** 7 Text Solution:

18000, 14000

#### **Video Solution:**



# **Text Solution:**

25, 25

### **Video Solution:**



# Q 9 Text Solution:

Rs.8; Rs. 10

## **Video Solution:**



# Q 10 Text Solution:

True

## **Video Solution:**



### Q 11 Text Solution:

16 units

#### **Video Solution:**



