Math Paper Test 5

Q1.Three numbers A, B and C are __, 20% and __% more than fourth number D. The difference between number A and B is more than __ and value of C is less than 50. Sum of D, E and F is 135. E is __ more than F which is 5 more than D.
Which of the following option satisfies the **blanks** above in same order?
A.12, 10, 5, 6 **B.**10, 20, 3, 4 **C.**15, 15, 8, 5 **D.**12, 20, 3, 3 **E.**8, 10, 10, 7

Q2.A can contains a mixture of milk and water in which milk is 17 liters and water is 18 liters. (M+3) liter of milk and 13 liters of water is added to the can. And the new ratio of milk and water is 25:31.If in this new mixture, (N+1) liter of milk and 5 liters of water is added then the new ratio of milk and water would have been 8:9. Find the value of (M+N).
A.8 Liter **B.**11 Liter **C.**13 Liter **D.**14 Liter **E.**7 Liter

Q3.A car travels 7z km distance at a speed of 70 km/h, z km distance at a speed of 140 km/h, and 5z km distance at a speed of 84 km/h and takes a total of 10.5 hours. In how much time (in minutes) it will cover (5z + 225) km distance at a speed of 120 km/h?
A.360 minutes **B.**240 minutes **C.**108 minutes **D.**270 minutes **E.**300 minutes

Q4.A vendor bought two pieces of furniture and sold them at the same price. He gained 20% on one piece while suffered a loss of m% on the other. The cost of the piece sold at profit was Rs. 2500 while that of the other piece was Rs. 3600. What would be the total selling price of the furniture if both were sold at m% profit?
A.Rs. 7007 **B.**Rs. 7117 **C.**Rs. 7267 **D.**Rs. 7200 **E.**Rs. 7166

The question below is followed by two statements I and II. You have to determine whether the data given in the statements is sufficient to answer the question.

Q5.By what percent, the marked price of the television was increased?
Statement I: Before increasing marked price of the TV, a boy paid Rs. 45000 after getting 25% discount on the marked price.
Statement II: After increasing marked price of the TV, a boy received the discount of 15% on the marked price and paid the money equal to the previous marked price.
A.Statement I alone is sufficient, but Statement II alone is not sufficient to answer the question.
B.Statement II alone is sufficient, but Statement I alone is not sufficient to answer the question.
C.Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.
D.Either statement alone is sufficient.
E.Both statements together are not sufficient to answer the question.

Q6.Raju, Kamal and Milan entered into a partnership with investment in the ratio 12:7:5 respectively. After one year, Kamal invested Rs.40000 more. After one more year, Milan invested Rs.20000 more. Find the range of the initial amounts invested by Raju, Kamal and Milan.
Statement I: At the end of three years, they earned a total profit of Rs.184000.
Statement II: Respective ratio of the shares of Raju and Kamal in the profit is 36:37.
A.Statement I alone is sufficient to answer the question, but the statement II alone is not sufficient.
B.Statement II alone is sufficient to answer the question, but the statement I alone is not sufficient.
C.Either statement I alone or statement II alone is sufficient to answer the question.
D.Both statements I and II together are needed to answer the question.
E.Both statements I and II together are not sufficient to answer the question.

Q7.Nilesh and Harish can do a piece of work in 45 days and 40 days respectively. They began to work together but Nilesh leaves after "a" days and Harish finished the rest of the work in (a+14) days, After how many days Nilesh leaves?
A.18 days **B.**5 days **C.**9 days **D.**7 days **E.**6 days

What approximate value will come in place of question mark (?) in the following question?

Q8.5949.999 ÷ 34.001 - 8280.993 ÷ 91.007 = ?
A.84 **B.**104 **C.**94 **D.**114 **E.**74

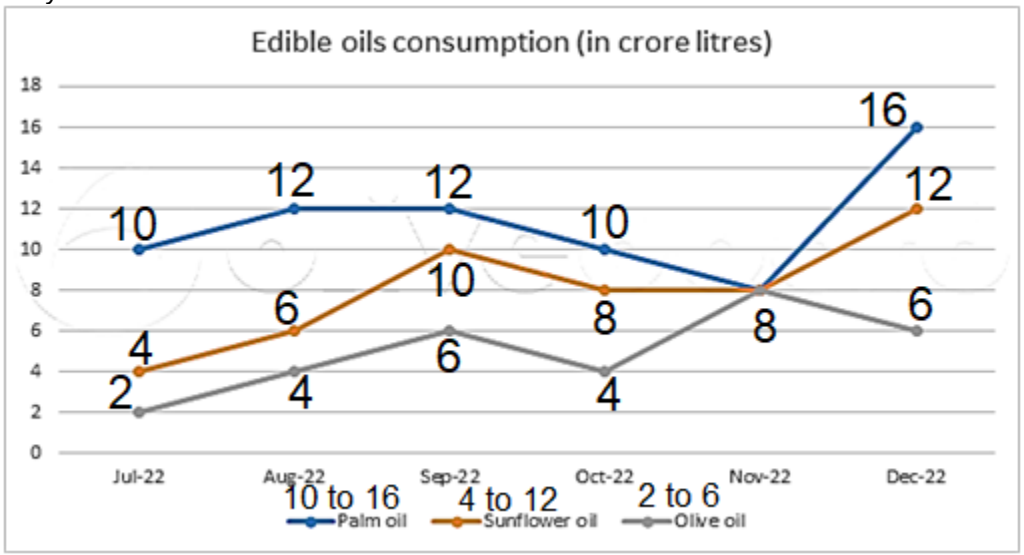
Q9. $\frac{215.99}{96.03} + \frac{547.95}{137.04} - \frac{215.01 + 135.05}{529.07 + 871.04} = ?$
A.4 **B.**12 **C.**10 **D.**6 **E.**7

Q10.$\sqrt{(847.99 + 773.01 - 150\ 0.03)} + 27.08^2 - 36.96 \times 39.99 = ? - 624.04$
A.-235 **B.**195 **C.**-116 **D.**162 **E.**-58

Q11. $? \times \{\frac{119.99}{99.99} \times 120.001 - 64.02\} = 160.01\%\ \text{of}\ 199.99 + 80.01$
A.15 **B.**11 **C.**5 **D.**7 **E.**9

Q12.82.22% of 199.99 - $(4.85)^2$ = $(?)^2$ + 75.01 * 1.85 - 179.99
A.23 **B.**17 **C.**15 **D.**13 **E.**27

Directions : Read the data carefully and answer the following questions.
The line graph shown below represents monthly consumption of edible oils in India in the year 2022.



Total consumption demand is met by domestic production of edible oils as well as from their imports. The monthly imports of these edible oils from July-22 to December-22 are given in the table below.

	Monthly Import per month (in crore litres)
Palm oil	6
Sunflower oil	4
Olive oil	2

Q13.How much olive oil and sunflower oil was consumed in October-22?
A.10 crore litres **B.**16 crore litres **C.**8 crore litres **D.**14 crore litres **E.**12 crore litres
Q14.What is the average monthly consumption of sunflower oil from July-22 to December-22?
A.5 crore litres **B.**6 crore litres **C.**9 crore litres **D.**2 crore litres **E.**8 crore litres
Q15.In August-22, if no olive oil and sunflower oil was produced domestically, what was the total import cost of olive oil and sunflower oil in August-22 if the import cost of sunflower oil is Rs.60/litre and that of olive oil is Rs.100/litre?
A.Rs.1020 crore **B.**Rs.1120 crore **C.**Rs.760 crore **D.**Rs.1420 crore **E.**Rs.1220 crore
Q16.The total domestic production of three given oils from October-22 to December-22 is:
A.44 crore litres **B.**42 crore litres **C.**40 crore litres **D.**46 crore litres **E.**48 crore litres
Q17.What is the ratio of total consumption of all three oils to total domestic production of all the three oils in December-22?
A.25:11 **B.**15:11 **C.**23:11 **D.**17:11 **E.**27:11
Q18.What percentage of total consumption of all the three types of oils was produced domestically in the month of September-22 and October-22?
A.50% **B.**56% **C.**54% **D.**52% **E.**58%
In the following questions, read the given statement and compare the Quantity I and Quantity II on its basis. (Only quantity is to be considered)
Q19.In a mixture, quantity of water is 16(2/3)% of that of milk. Quantity of milk becomes twice of that of water, when 14 L mixture is replaced with 12 L of water.
Quantity I: If per cent of total mixture which was replaced is P%, then the value of P?
Quantity II: Find the difference between the quantities of milk and water in the final mixture in litres.
A.Quantity I > Quantity II **B.**Quantity I < Quantity II **C.**Quantity I ≥ Quantity II
D.Quantity I ≤ Quantity II **E.**Quantity I = Quantity II or relation can't be determined
In the following question, two statements numbered I and II are given. On solving them, we get quantities I and II, respectively. Compare the numeric value of both the quantities and choose the correct option.
Q20.Quantity I: A shopkeeper marks up a product by 40% and provides a discount of 25% in selling the item but uses 800 gm weight as 1 kg. What is his percentage profit?
Quantity II: The cost price of 50 items is equal to the marked price of 40 items. If 25% loss is made in selling those items, what is the percentage discount provided?
A.Quantity I > Quantity II **B.**Quantity I < Quantity II **C.**Quantity I ≥ Quantity II
D.Quantity I ≤ Quantity II **E.**Quantity I = Quantity II or a relation can't be established
In the following question, two equations I and II are given. Solve both the equations carefully and choose the correct option.
Q21.I: $40x^2/3 - 47x + 36 = 0$
II: $5y^2 - 79y/2 + 66 = 0$
A.x > y **B.**x < y **C.**x ≥ y **D.**x ≤ y **E.**x = y or no relation can be established between x and y
Q22.I. $X^2 - 56X + 783 = 0$
II. $Y^2 - 65Y + 1056 = 0$
A.x > y **B.**x < y **C.**x ≥ y **D.**x ≤ y **E.**x = y or no relation can be established between x and y
Q23.(I).$10x^2 + 34x - 192 = 0$
(II) $3y^2 - 51y - 252 = 0$
A.x > y **B.**x < y **C.**x ≥ y **D.**x ≤ y **E.**x = y or no relation can be established between x and y
Q24.(I) $4x^2 - 82x + 210 = 0$
(II) $16y^2 + 116y + 180 = 0$
A.x > y **B.**x < y **C.**x ≥ y **D.**x ≤ y **E.**x = y or no relation can be established between x and y
Directions : Study the information carefully and answer the following questions.
In company A there are four departments, viz HR department, marketing department, finance department and sales department in which some employees work.
The total number of employees working in marketing department is 600 which is 3/2 of total number of employees working in HR department. Ratio of male employees to female employees in HR department is 1: 3. Total number of female employees working in marketing department is 200 and total number of male employees working in sales department and marketing department is same. Total number of employees working in company A is 2200 and the number of male employees working in company A is 200 more than the total female employees in that company. Total female employees working in Sales department is 300.
Q25.Find the ratio of the total number of male employees working in marketing department to the total number of female employees working in sales department.
A.1: 3 **B.**4: 3 **C.**2: 5 **D.**3: 2 **E.**5: 1
Q26.Find the total number of employees working in sales department is how much more than the total number of female employees working in HR department.
A.200 **B.**300 **C.**400 **D.**500 **E.**100
Q27.The total number of employees working in finance department is what percent more than the total number of female employees working in marketing department?
A.100% **B.**120% **C.**150% **D.**80% **E.**90%
Q28.Find the difference between the half of the total number of employees working in finance department and the total number of male employees working in HR department.
A.150 **B.**230 **C.**120 **D.**340 **E.**180
Q29.2 fair dice are rolled simultaneously. What is the probability that the result on one of the dice will be greater than or equal to 5 and the result on the other dice will be less than 3?
A.4/9 **B.**2/9 **C.**3/8 **D.**5/8 **E.**4/11
Q30.A person invested Rs.8000 in two different schemes A and B each for 4 years and 2 years respectively. Scheme A offers '3x%' rate of per annum simple interest and scheme B offers '3x%' rate of per annum compound interest. What is the value of 'x' if interest amount from scheme A is Rs.'408x' more than that from scheme B?
A.5 **B.**15 **C.**10 **D.**20 **E.**None of these

1. Solution
D + E + F = 135
F = 5 + D
B = 1.2D
From option 1: A = 12 + D, C = 1.1D
E = 6 + F = 6 + 5 + D = 11 + D
Then, D + 11 + D + 5 + D = 135
D = 39.67
C = 1.1 x 39.67 = 43.64 < 50
Then, A = 12 + 39.67 = 51.67
B = 1.2 x 39.67 = 47.6
Difference between A and B = 51.67 - 47.6 = 4.07 < 5
Hence, this case is not possible.
From option 2: A = 10 + D, C = 1.2D
E = 4 + F = 4 + 5 + D = 9 + D
Then, D + 9 + D + 5 + D = 135
D = 40.33
C = 1.2 x 40.33 = 48.4 < 50
Then, A = 10 + 40.33 = 50.33
B = 1.2 x 40.33 = 48.4
Difference between A and B = 50.33 - 48.4 = 1.93 < 3
Hence, this case is not possible.
From option 3: A = 15 + D, C = 1.15D
E = 5 + F = 5 + 5 + D = 10 + D
Then, D + 10 + D + 5 + D = 135
D = 40
C = 1.15 x 40 = 46 < 50
Then, A = 15 + 40 = 55
B = 1.2 x 40 = 48
Difference between A and B = 55 - 48 = 7 < 8
Hence, this case is not possible.
From option 4: A = 12 + D, C = 1.2D
E = 3 + F = 3 + 5 + D = 8 + D
Then, D + 8 + D + 5 + D = 135
D = 40.67
C = 1.2 x 40.67 = 48.8 < 50
Then, A = 12 + 40.67 = 52.67
B = 1.2 x 40.67 = 48.8
Difference between A and D = 52.67 - 48.8 = 3.87 > 3
Hence, this case is possible.
From option 5: A = 8 + D, C = 1.1D
E = 7 + F = 7 + 5 + D = 12 + D
Then, D + 12 + D + 5 + D = 135
D = 39.33
C = 1.1 x 39.33 = 43.27 < 50
Then, A = 8 + 39.33 = 47.33
B = 1.2 x 39.33 = 47.17
Difference between A and D = 47.33 - 47.17 = .16 < 6
Hence, this case is not possible.
2. **Solution**
The milk and water in the can is 17 and 18 litres respectively.
First condition,
[17+(M+3)] / (18+13) = 25/31
M = 5
Second condition,
[25+ (N+1)] / (31+5) = 8/9
N = 6
Hence, M+N = 5+6 = 11 liters
3. **Solution**
According to the question,
7z/70 + z/140 + 5z/84 = 630/60
=> z/6 = 630/60
=> z = 63
So, time taken by the car to cover (5z + 225) km at a speed of 120 km/h = (5 * 63 + 225)/120 = 4.5 hours = 4.5 * 60 = 270 minutes
4. **Solution**
S.P. of the piece sold at 20% profit = 1.2 * 2500 = 3000
So, S.P. of other article = 3000
C.P. of the other article = 3600
So, loss = 600/3600 = 16.66%
m = 16.66%
So, total C.P. = 2500 + 3600 = 6100
Total S.P. (new) = 1.1666 * 6100 = Rs. 7116.66 ~ Rs. 7117
5. **Solution**
Let the marked be m
From the statement I,
75% of m = 45000
M = 60000
We don't have any information about the new marked price therefore, by this statement alone, we could not conclude our answer
From the statement II,
Let the new marked price = n then,
85% of n = m
m/n = 85/100
The percentage increase = 15*100/85 = 300/17%
Since we need only percentage, this statement alone is sufficient to determine our answer
6. **Solution**
Let, initial amounts invested by Raju, Kamal and Milan be Rs.12k, Rs.7k and Rs.5k respectively.
Ratio of shares in the profit:
Raju : Kamal : Milan = (12k x 3) : [7k x 1 + (7k + 40000) x 2] : (5k x 2 + 5k + 20000)
= 36k : (7k + 14k + 80000) : (10k + 5k + 20000)
= 36k : (21k + 80000) : (15k + 20000)
From I:
At the end of three years, they earned a total profit of Rs.184000.
From II:
36k/(21k + 80000) = 36/37
=> 37k = 21k + 80000
=> 37k - 21k = 80000
=> 16k = 80000
=> k = 80000/16
=> k = 5000
Initial amount invested by Raju = 12k = 12 x 5000 = Rs.60000
Initial amount invested by Kamal = 7k = 7 x 5000 = Rs.35000
Initial amount invested by Milan = 5k = 5 x 5000 = Rs.25000
Range = 60000 - 25000 = 35000
Hence, statement II alone is sufficient to answer the question, but the statement I alone is not sufficient.
7. **Solution**
Nilesh and Harish combined one day work is (1 / 45) + (1 / 40) = (17 / 360)

Since they have done work together for" a" days so they have completed (17a / 360)
So the remaining work is 1 - (17a / 360) which will be completed by Harish in (a+14) days
Therefore (a+14) / 40 = 1 - (17a / 360) ----(1)
By solving equation (1), we get a = 9 days.

8. **Solution**

5949.999 ÷ 34.001 - 8280.993 ÷ 91.007 = ?
5950 ÷ 34 - 8281 ÷ 91 = ?
175 - 91 = ?
? = 84

9. **Solution**

$$\frac{215.99}{96.03}+\frac{547.95}{137.04}-\frac{215.01+135.05}{529.07+871.04}=?$$

$$\frac{216}{96}+\frac{548}{137}-\frac{215+135}{529+871}=?$$

$$\frac{9}{4}+4-\frac{350}{1400}=?$$

$$\frac{9}{4}+4-\frac{1}{4}=?$$

? = 6

10. **Solution**

$$\sqrt{847.99+773.01-1500.03}+27.08^2-36.96\times39.99=?-624.04$$

$$\sqrt{848+773-1500}+27^2-37\times40=?-624$$

$$\sqrt{121}+729-1480=?-624$$

11 - 751 = ? - 624
? = -116

11. **Solution**

? * {(119.99/99.99 * 120.001) - 64.02} = 160.01% of 199.99 + 80.01
? * {(120/100 * 120) - 64} = 160% of 200 + 80
? * (144 - 64) = 320 + 80
? * 80 = 400
? = 5

12. **Solution**

82.22% of 199.99 - $(4.85)^2$ = $(?)^2$ + 75.01 * 1.85 - 179.99
82% of 200 - $(5)^2$ = $(?)^2$ + 75 * 2 - 180
164 - 25 = $(?)^2$ + 150 - 180
139 = $(?)^2$ - 30
$(?)^2$ = 169
? = 13

13. **Solution**

	Palm oil (in crore litres)	Sunflower oil (in crore litres)	Olive oil (in crore litres)	Total consumption (in crore litres)	Total imports (in crore litres)	Domestic production (in crore litres)
July-22	10	4	2	16	12	16-12 = 4
August-22	12	6	4	22	12	22-12 = 10
September-22	12	10	6	28	12	28-12 = 16
October-22	10	8	4	22	12	22 - 12 = 10
November-22	8	8	8	24	12	24-12= 12
December-22	16	12	6	34	12	34-12 = 22
Total	68	48	30	146	72	74

Olive oil and Sunflower oil consumption in October-22 = 8 + 4 = 12 crore litres

14. Average monthly consumption of sunflower oil from July-22 to December-22 = 48/6 = 8 crore litres
15. Total import cost of olive oil and sunflower oil in August-22 = 6 X 60 + 4 X 100 = Rs. 760 crore
16. Total domestic production of three given oils from October-22 to December-22 = 10 + 12 +22 = 44 crore litres
17. Ratio of total consumption of all three oils to total domestic production of all the three oils in December-22 = 34:22 = 17:11
18. Percentage of total consumption of all the three types of oils was produced domestically in the month of September-22 and October-22 = $\frac{10+16}{28+22}\times100=52\%$

19. **Solution**

Let initial quantity of milk = '6x' L
So, initial quantity of water = 16(2/3)% of '6x' = 'x' L
Quantity of milk taken out = 14 * 6/(6 + 1) = 12 L
Quantity of water taken out = 14 - 12 = 2 L
From the question:
(6x - 12) = 2 * (x - 2 + 12)
3x - 6 = x + 10
x = 8

Quantity I:

Quantity of mixture replaced = 14 L
Total quantity of mixture = 8 * (6 + 1) = 56 L
Required percentage = (14/56) * 100
P% = 25%
P = 25

Quantity II:

Quantity of milk in final mixture = 6 * 8 - 12 = 36 L
Quantity of water in final mixture = 8 - 2 + 12 = 18 L
Required difference = 36 - 18 = 18 L
Hence, Quantity I > Quantity II

20. **Solution**

Quantity I:

Let the C.P of the product be Rs 100 per kg
M.P = Rs 140 per kg
S.P = 140*(75/100) = Rs 105 per kg
If a customer buys 1 kg, he is actually sold 800 gm
Actual C.P for the shopkeeper = (800/1000)*100 = Rs 80
Percentage profit = ((105 - 80)/80)*100% = 31.25%

Quantity II:

Let the C.P of 1 item be Rs 4
S.P of 1 item = 4*(1 - 25/100) = Rs 3
C.P of 50 items = M.P of 40 items
=> M.P of 1 item = C.P of (5/4) items
=> M.P of 1 item = (5/4)*4 = Rs 5

So, percentage discount = ((M.P - S.P)/M.P)*100% = 40%

21. **Solution**

From I:

$40x^2/3 - 47x + 36 = 0$

$\Rightarrow 40x^2 - 141x + 108 = 0$

$\Rightarrow 40x^2 - 45x - 96x + 108 = 0$

$\Rightarrow (8x - 9)(5x - 12) = 0$

$\Rightarrow x = 9/8, 12/5$

From II:

$5y^2 - 79y/2 + 66 = 0$

$\Rightarrow 10y^2 - 79y + 132 = 0$

$\Rightarrow 10y^2 - 55y - 24y + 132 = 0$

$\Rightarrow (5y - 12)(2y - 11) = 0$

$\Rightarrow y = 12/5, 11/2$

When x = 9/8, y = 12/5, then x < y

When x = 9/8, y = 11/2, then x < y

When x = 12/5, y = 12/5, then x = y

When x = 12/5, y = 11/2, then x < y

Hence, $x \leq y$

22. **Solution**

From equation I,

$X^2 - 56X + 783 = 0$

$X^2 - 27X - 29X + 783 = 0$

$X (X - 27) - 29 (X - 27) = 0$

$(X - 29) (X - 27) = 0$

$X = 29, 27$

From equation II,

$Y^2 - 65Y + 1056 = 0$

$Y^2 - 32Y - 33Y + 1056 = 0$

$Y (Y - 32) - 33 (Y - 32) = 0$

$(Y - 33) (Y - 32) = 0$

$Y = 33, 32$

	Y = 33	Y = 32
X = 29	X < Y	X < Y
X = 27	X < Y	X < Y

Hence, X < Y

23. **Solution**

Type of Equations	**Sign of coefficient of 'x'**	**Sign of constant term 'c'**	**Sign of roots (Bigger, Smaller)**
$ax^2 + bx + c = 0$	+	+	- , -
$ax^2 + bx - c = 0$	+	-	- , +
$ax^2 - bx + c = 0$	-	+	+, +
$ax^2 - bx - c = 0$	-	-	+, -

(I) $5x^2 + 17x - 96 = 0$

Since, the sign of coefficient of 'x' is positive and the sign of constant term 'c' is negative.

So, from the above table, we can conclude that one root of the equation will be positive, and one root of the equation will be negative.

(II) $y^2 - 17y - 84 = 0$

Since, the sign of coefficient of 'y' is negative and the sign of constant term 'c' is negative.

So, from the above table, we can conclude that one root of the equation will be positive, and one root of the equation will be negative.

Hence, x = y or relationship cannot be established.

24. **Solution**

Type of Equations	**Sign of coefficient of 'x'**	**Sign of constant term 'c'**	**Sign of roots (Bigger, Smaller)**
$ax^2 + bx + c = 0$	+	+	- , -
$ax^2 + bx - c = 0$	+	-	- , +
$ax^2 - bx + c = 0$	-	+	+, +
$ax^2 - bx - c = 0$	-	-	+, -

(I) $2x^2 - 41x + 105 = 0$

Since, the sign of coefficient of 'x' is negative and the sign of constant term 'c' is positive.

So, from the above table, we can conclude that both roots of the equation will be positive.

(II) $4y^2 + 29y + 45 = 0$

Since, the sign of coefficient of 'y' is positive and the sign of constant term 'c' is positive.

So, from the above table, we can conclude that both roots of the equation will be negative.

Hence, x > y.

25. **Solution**

Let the total no. of female employees working in company A is 'a'.

And the total no. of male employees working in company A is 'a+200'.

The total no. of employees working in company A = 2200

a + a + 200 = 2200

a = 1000

Hence, the total no. of female employees working in company A is 1000

And the total no. of male employees working in company A is 1200

The total no. of employees working in marketing department = 600

The no. of female employees working in marketing = 200

The no. of male employees working in marketing = 600 - 200 = 400

The total no. of employees working in HR department = total no. of employees working in marketing * 2/3

= 600 * 2/3

= 400

The total no. of male employees working in HR = 400 *1/4 = 100

And the total no. of female employees working in HR = 400 - 100 = 300

Total female employees working in Sales department = 300

Total male employees working in Sales department =400

Total employees working in Sales department is = 300 + 400 = 700

The total no. of employees in finance department = 2200 - (400 +600 +700) =500

The total no. of male employees in finance department = total male employees in company A - (100 + 400 + 400)

= 1200 - 900 = 300

The total female employees in finance department = total employees in finance department - male employees in finance department

= 500 - 300 = 200

	Total no. of employees	Male employees	Female employees
HR	400	100	300
Marketing	600	400	200

Finance	500	300	200
Sales	700	400	300

The total no. of male employees working in marketing = 400
The total no. of female employees working in sales = 300
Ratio = 400/ 300 = 4: 3
26. The total no. of employees working in sales = 700
The total no. of female employees working in HR = 300
Required value = 700 - 300 = 400
27.
The total no. of employees in finance = 500
The total no. of female employees in marketing = 200
The percentage more = (500 - 200) * 100/200 = 150%
28. The total no. of employees working in finance = 500
The half no. of employees working in finance = 500/2 = 250
The total no. of male employees working in HR = 100
Required difference = 250 - 100 = 150
29. **Solution**
Let the results on the 2 dice be Dice 1 and Dice 2
Required probability
= P(Dice 1 ≥ 5, Dice 2 < 3) + P(Dice 1 < 3, Dice 2 ≥ 5)
= (2/6)*(2/6) + (2/6)*(2/6)
= 2/9
30. **Solution**
Amount of interest from scheme A = (8000 * 3x * 4)/100 = 960x
Amount of interest from scheme B = 8000 * $[(1 + 3x/100)^2 - 1] = (7.2x^2 + 480x)$
According to the question:
$960x - (7.2x^2 + 480x) = 408x$
7.2x = 72
x = 10
Hence, value of x = 10