Statement Test 7

1. Vinay, Suyash and Virat together purchased 1280 pens out of which 30% were purchased by Virat. If Vinay purchased 28.57% more pens than Suyash purchased, then find the number of pens purchased by Suyash.
(A) 458 (B) 374 (C) 425 (D) 392 (E) None of these
2. Ratio of juice to water in a vessel is 3 : 2. 50 liters of the mixture is taken out and 60 liters of juice and 60 liters of water is added. The ratio of Juice to water becomes 5 : 4. Find the amount of juice in the initial mixture.
(A) 156 (B) 138 (C) 120 (D) 145 (E) None of these
3. A, B and C can complete a piece of work in 30 days and they are paid a sum of Rs. 3780. If the efficiency of A, B, and C are in the ratio of 6 : 7 : 8, then find the daily income of B. (A) 68 (B) 48 (C) 42 (D) 64 (E) None of these
4. Sum of present age of A, B and C is 130 years. Six years later, the ratio of ages of A and B will be 8 : 9 respectively. If A is 2 years elder to C, then in how many years will B be 58 years old?
(A) 10 (B) 17 (C) 14 (D) 19 (E) None of these
5. A does 30% work in 12 days. After that B joined him and they together completed the remaining work in 12 days. Find how many days will B take to complete the work alone ? A. 60 B. 90 C. 120 D. 30 E. None
6 . P can do a piece of work in 40 days and Q can do it in 50 days. They work together for 10 days. Then P leaves and Q continues the work. 5 days after that, R joins the work and the work is completed in 10 more days. In how many days R can do it alone?
A. 40 B. 30 C. 50 D. 60 E. , None
7. A shopkeeper marked the price of an article by 40% above cost price and gave discount of Rs. 224. On the final amount, he charged 10% tax. In the whole transaction, he earned Rs. 158.6. Find cost price of the article.
A. 750 B. 760 C. 744 D. 757 E. None
8. A and B invested in the ratio Rs 8112 and Rs. 6760 for 8months and 6months respectively. If the total profit Rs. 4576 , then find the profit share of A.
A. 2519 B. 2375 C. 2816 D. 2154 E. None
9. Two train of length 455m and 555m run on parallel tracks and running in same direction faster train pass slower train 10 second but when running in opposite direction they pass each other in 5 seconds find their speeds ?
A. 151.5 , 50.5 B. 150.5 , 51.5 C. 105.5 , 51.5 D. 110.5 , 50.5 E. None
10. A boat covers a distance from 'p' to 'q' downstream and return at original place upstream. The speed of boat in still water 22.5 km/hr and stream is flowing at 2.5km/hr. Find the average speed of the journey ?
A. 100/9 B. 200/9 C. 300/9 D. 200/3 E. None
11. Pipe A alone can fill a tank in 2 hours more than that of A and B together while pipe B can fill it in 12.5 hours more than that of A and B together, in what time pipe A can fill it ? A. 7hrs B. 8hrs C. 5hrs D. 6hrs E. None
12. Some amount out of 20000 lent at the rate 15% per annum and rest at the rate 25% per annum and thus after 4 years, the total interest collected was 14200. what is the difference between amount lent at 15% per annum and 25% per annum ?
A. 9000 B. 8000 C. 6000 D. 7000 E. NONE
13. In what ratio should water and wine be mixed that after selling the mixture at the cost price a profit of 8.33 % is made .
A. 1 : 12 B. 5 : 16 C. 1 : 8 D. 12:13 E. None
14. PATIL and SHAAN invested in a partnership Rs. 2200and Rs. S and ratio of time of investment is 7 : 5 respectively. If profit share of PATIL is 10% more than profit share of SHAAN. Find difference between capital invested by both ?
A. 500 B. 600 C. 2200 D. 2800 E. None
15. A milkman has a container and it contains mixture of milk and water in which milk is 60%. After selling 40% of mixture he add 30 litre water, now the concentration of milk and water is reversed compared to the initial ratio. Find the initial quantity of milk in the container ?
A. 60 B. 100 C. 40 D. 80 E. None
16. The length of a rectangle is increased by 8.33% while its breadth is decreased by 31.25%. Then find the percentage change in the area of rectangle.
A. 25.52% B. 26.62% C. 27.27% D. 23.33% E. none
17. P, Q and R can complete a piece of work in 10, 12 and x days. All three started the work, after 2 days, R left the work and after next 2 days, P also left. Remaining work was completed by Q in 1.6 days. What is the value of x ?
A. 15 B. 12 C. 10 D. 18 E. None
18. MARK bought an article and marked up the price by 80% above its cost price. He gave a discount of Rs.880 such that profit and discount is same. Find selling price of article ?
A. 3800 B. 3020 C. 3080 D. 3808 E. None
19. 2 years ago, the average age of I, N & U was 38 years. Ratio of present age of I to N is 9:8 and present age of U is 12.5% less than that of N. Find the difference between I's age after 3 years and N's age 2 years ago?
A. 10 B. 8 C. 12 D. 14 E. None
20. Ratio of marked price and cost price of an article is 13:10 . If shopkeeper allow 7.69% discount on marked price. If sum of discount and profit is Rs. 58.2 then find the marked price of an article. ?
A. 252.2 B. 254.2 C. 252.4 D. 222.2 E. None
21. The ratio of the income and savings of Ajay, 9 : 4. In the next year his income increased by 15% while his savings decreased by 10%, If his expenditure in the next year Rs 33750. then find his expenditure of last year.
A) 25000 B) 20000 C) 18000 D) 35000 E) None of these
22. Two buses departed for a place respectively at 45 km/h and 60 km/h. if the second bus took5 1/2 hours less to reach the destination then what was the distance of the journey?
(a) 100 km (b) 945 km (c) 990 km (d) 1350 km
23. The minimum fare of an auto-rickshaw for first 1.2 km is Rs. 6.50 later, 60 paisa is added for every 100 m. How much will a person pay for covering 4.8 km?
(a) Rs 8.66 (b) Rs 25.20 (c) Rs 21.50 (d) Rs 28.10
24. A and B complete a work alone in 10 hours and 20 hours respectively. After working for 5 hours together A left the work then in how much time would B complete the rest work?
(a) 5 hrs (b) 4 hrs (c) 3 hrs (d) 20 hrs
25. Three taps A, B and C can fill a tank respectively in 12, 15 and 20 hours. If tap A is open through out and taps B & C are opened alternatively for one hour then in how much time will the tank full?
(a) 6 hour(b) 6 1/2hour(c) 7 hour(d)71/2 hour
26. In an examination a student scored 4 marks for every correct answer and losed 1 mark for every lose answer. A student attempted all the 200 questions and scored in all, 200 marks. The number of questions he answered correctly was
(a) 82 (b) 80 (c) 68 (d) 60
27. A and B can do a work in 18 and 24 days respectively. They worked together for 8 days and then A left. The remaining work was finished by B in:
(a) 5 (1/3)days (b) 5 days (c) 8 days (d) 10 days.

1. Ans. (D)
Pen purchased by Vinay & Suyash
= 1280 × 0.7 = 896
Pen purchased by Suyash
= 896/(1 + 9/7) = 896 × 7/16 = 392
2. Ans. (C)
Initially, Juice = 3x L, Water = 2x L
(3x – 30 + 60)/(2x – 20 + 60) = 5/4
4 × (3x + 30) = 5 × (2x + 40)
12x + 120 = 10x + 200
2x = 80
x = 40
Amount of Juice in Initial mixture = 3 × 40 = 120 L
3. Ans. (C)
Daily Income of B = 3780/30 × 7/21
= 126 × 1/3 = 42 Rs.
4. Ans. (A)
At present, Age of A = (8x – 6) years
Age of B = (9x – 6) years
Age of C = (8x – 6) – 2
= (8x – 8) years
(8x – 6) + (9x – 6) + (8x – 8) = 130
25x = 130 + 20 = 150
x = 6
Present Age of B = 9 × 6 – 6
= 54 – 6 = 48 years
B will be 58 years old after
= 58 – 48 = 10 years
5.d
Let work=120
30% work=36
Efficiency of A=3
70%work= 84/12=7
Efficiency of B= 4
Time taken by B= 120/4= 30
6.a
Let work=200
Efficiency of P=5,Q=4
P+Q=9
10days work=90
Q's 5 day worked=20
Remaining=90/10=90
Efficiency of R=9-4=5
Time taken byR=200/5=40
7.a
cost price be Rs. 100x
Marked price = 140 /100 × 100x = Rs 140x
Selling price = Rs (140x − 224)
Selling price after tax = 110 /100 × (140x − 224) = Rs (154x − 246.4
ATQ, 100x + 158.6 = 154x − 246.4 x = 7.5 Cost price of article = 100x = Rs 750
8.c
Ratio of investment of A and B=6:5
Ratio =6x×8 : 5x×6
=8:5
Profit of A=4576(8)/13=2816
9) T1 = 455
T2 = 555
S1-S2 = 1010/10 = 101m/sec
S1 +s2 = 1010/5 = 202m/sec
S1 = 151.5
S2 = 50.5
Option a
10) DOWNSTREAM = 22.5+2.5 = 25
UPSTREAM = 22.5 – 2.5 = 20
AVG SPEED = 2 x 25 x 20 / 45 = 200/9 (b)
11) a+b = x
a= x + 2
b = x + 12.5 x = (2 x 25/2)1/2
x = 5
a = 5+2 = 7 ans (A)
12) 20000 @15% = 3000 3000 5000
3550
20000@ 25% = 5000 1450 550
14200/4 = 3550 29 : 11 = 40 = 20000
1 UNIT = 500
29 -11 = 18 *500 = 9000 ANS (A)
or you can solve by total inclination method by Aashish sir.
20000
part I part II
15% 25%
15% 15%(say)
(say entire amount is invested on 15% for 4 years)
total interest 15% x 4= 60%
60% of 20000= 12000 (but according to question it is 14200)
so, the extra amount (14200-12000=2200) is due to the part invested at 25% for 4 years
out of 25% we have already calculated the 15%. so remaining 10% for four years of part II = 2200
(why part - II?
because extra interest is due to the part - II)
10% x 4 ——-> 2200
40% of part II= 2200
100% of part II = 5500
part II= 5500, part I = 20000-5500= 14500
part I - part II = 14500-5500 = 9000
(explanation might seem lengthy but question with easy numbers get solved in less time)
13) 8.33 % = 1/ 12
Ratio = 1:12 ans (a)
14) P/S = 2200 x 7 /s x 5 = 11 / 10
S = 2800
p-s = 600 (b)
15) m : w
3 : 2
-40%
3 : 2
+30
2:3 (equal milk ratio)
6 : 4
+5 unit = 30 = 1 unt = 6
6 : 9
Total 100LTRS . MILK 60 WATER 40 (A)
16) 12 : 13

X 16 : 11
192 143
49/192*100 = 25.52 (A)
17) P 10 6x
Q 12 60x 5x
R x 60
60x- 120-22x-22x=
16x – 120 = 8x
8x = 120
X = 15 (a)
18) mp – disc = cp + profit
180x – 880 = 100x + 880
80x = 1760
X = 22
Sp = 22x180-880 = 3080 ans (C)
19) I + N + U = 120
9 : 8 : 7 = 24unit =120
48-38=10(a)
20) mp/cp = 13/10
Sp = 12
Dis + profit = 1 + 2 = 3unit = 58.2
1 unit = 19.4
Mp = 252.2 (a)
21.
26

1. A) Let his last year income 9x & savings 4x

Expenditure= 9x -4x =5x
Next year his expenditure = 33750

$$33750 = 9x \times \frac{115}{100} - 4x \times \frac{90}{100}$$
$$x = 5000$$

His last year expenditure = 5x = 25000

22.

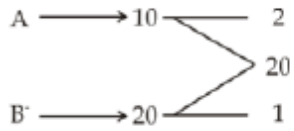
$$5 \rightarrow 45 : 60$$
$$3 : 4$$
$$T \rightarrow 4 : 3$$

We have, 1 unit $= \frac{11}{2}$ hrs.
$\therefore$ 4 unit $= \frac{11}{2} \times 4 = 22$ hrs.
Required distance = 45 × 22 = 990 km

23.
Fare for first 1.2 km = Rs 6.50
Remaining distance = 4.8 – 1.2 = 3.6 km
So, extra fare for rest of the travel $= \frac{3600}{100} \times \frac{60}{100} = Rs\ 21.6$
Total fare = 6.50 + 21.60 = Rs 28.10

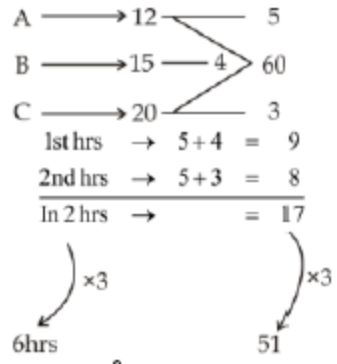
24.

S104. Ans.(a)
Sol.



Work done in 5 hrs = 5 × 3 = 15
Remaining work will be done by B
$= \frac{5}{1} = 5$ hours

25.
S105. Ans.(c)
Sol.

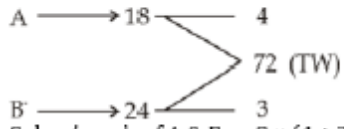


Now, $6 + \frac{9}{9} = 7$ hrs.

26.
S106. Ans.(b)
Sol.
Let student answer x questions correct & y questions wrong.

$$\therefore \quad x + y = 200$$
$$\& \quad 4x - y = 200$$
$$5x = 400$$
$$x = 80$$

27.
S109. Ans.(a)
Sol.



8 days' work of A & B → 8 × (4 + 3) = 56
Remaining work = 72- 56 = 16
Remaining work finished by B $= \frac{16}{3} = 5\frac{1}{3}$ days