Google Aptitude Questions and Answers with Explanation

1. Ajay takes thrice as long to row a distance against the stream as to row the same distance in favor of the stream. The ratio of the speed of the boat in still water and stream is

A. 2:1
B. 2:3
C. 3:1
D. 1:2

Answer - A. 2:1
Explanation:
Let us assume
Speed downstream = x kmph
Speed upstream = 3x kmph
(3x+x)/2 : (3x-x)/2
4x/2 : 2x/2 = 2:1

2. A boat takes 30 hours for traveling downstream from point A to point B and coming back to point C midway between A and B. If the velocity of the stream is 2 kmph and the speed of the boat in still water is 15 kmph, what is the distance between A and B?

A. 342 km
B. 308 km
C. 356 km
D. 316 km

Answer - B. 308 km
Explanation:
Given
The velocity of the stream = 2 kmph
A speed of the boat in still water is 15 kmph
Speed downstream = (15+2) = 17 kmph
Speed upstream = (15-2) = 13 kmph
Let the distance between A and B be x km
x/17+(x/2)/13=30
x/17+x/26=30
43x/442=30
x=30*442/43 = 308.37 = 308 km
the distance between A and B = 308 km

3. At present Vishnu age is twice Dina's age and half of Kanan's age. After 4 years Vishnu will be 1.5 times Dina's age and Kanan will be 2.5 times Dina's age, then find the Kanan's age.

A. 18 years
B. 22 years
C. 16 years
D. 14 years

Answer – C. 16 years
Explanation:
Dina's present age = x
Vishnu's present age = 2x
Kanan's present age = 4x
After 4 years
Vishnu's age = 1.5*Dina's age
2x+4 = 1.5(x+4)
0.5x = 2
X=4
4x=16 years

4. At present Sravan is four times Jagan's age. After 8 years Sravan will be 3 times Jagan's age. How many times will Sravan' s age be in another 8 years times with respect to Jagan's age?

A. 2.5
B. 3
C. 4.5
D. 2

Answer – A. 2.5
Explanation:
4x+8 = 3(x+8)
4x+8 = 3x+24
x = 16
After 8 more years
J = 16+16 = 32
S = 4*16 + 16 = 64+16 = 80
80/32 = 2.5 times

5. A starts the business with Rs. 7000 and after 5 months, B joins with A as his partner. After 1 year, the profit is divided in the ratio 2 : 3. What is B's contribution to the capital?

A. Rs. 15000
B. Rs. 18000
C. Rs. 13000
D. Rs. 12000

Answer – B. Rs. 18000
Explanation:
Let B's capital be Rs. x. Then.
(7000 x 12) / 7x = 2/3 [capital ratio= profit ratio] 14x = 252000 x = 18000
6. Renuka and Swapna invested in a partnership business. Renuka invests Rs. 70,000 for 8 months and Swapna invests Rs. 84,000 for 10 months. Out of a profit of Rs. 63140. What is Renuka's share?

A. Rs. 25000
B. Rs. 25256
C. Rs. 24500
D. Rs. 25270

Answer – B. Rs. 25256
Explanation:
Ratio of their shares = (70000 x 8) : (84000 x 10) = 2 : 3.
R's share = Rs.63140 x 2/5 = Rs. 25256
Therefore, the share of the Renuka is Rs. 25256.

7. A man can row 30 km upstream and 44 km downstream in 10 hrs. Also, he can row 40 km upstream and 55 km downstream in 13 hrs. Find the speed of the man in still water.

A. 8 km/hr
B. 10 km/hr
C. 12 km/hr
D. 5 km/hr

Answer - A. 8 km/hr
Explanation:
Let upstream speed = x, downstream speed = y km/hr
Then, 30/x + 44/y = 10 and 40/x + 55/y = 13
Put 1/x = a, 1/y = b
Solve the equations.

A = 1/5, b = 1/11
So, x = 5, y = 11
Speed in still water = (5+11)/2 = 8
Therefore, the speed of the man in water is 8 km/hr.

8. An alloy contains Brass, Iron, and Zinc in the ratio 2:3:1 and another contains Iron, zinc, and lead in the ratio 5:4:3. If equal weights of both alloys are melted together to form a third alloy, then what will be the weight of lead per kg in new alloy?

A. 5 1/9
B. 4 1/7
C. 1/8
D. 1/4

Answer – C. 1/8
Explanation:
Shortcut:
In the first alloy,
2:3:1 =6*2
5:4:3 =12
Multiply 2 to make it equal,
4:6:2
5:4:3
Adding all,
4:11:6:3=24
3/24=1/8

9. Rice worth Rs. 126 per kg and Rs. 134 per kg are mixed with a third variety in ratio 1: 1: 2. If the mixture is worth Rs. 177 per kg, the price of the third variety per kg will be:

A. 224
B. 238
C. 254
D. 216

Answer – A. 224
Explanation:
126*1+134*1+2x=177*4
260+2x=708
2x==708-260=448

x=448/2 = 224
Therefore, the price of the third variety per kg will be Rs. 224

10. The average cost of 32 different Mobiles is Rs. 9000. Among them, Samsung which is the costliest is 70% higher price than the cheapest Mobile Vivo. Excluding those both mobiles, the average of the Mobiles is Rs.8880. Then what is the cost of Samsung Mobile?

A. Rs. 11600
B. Rs. 12400
C. Rs.13600
D. Rs. 10000

Answer – C. Rs.13600
Explanation:
V+S = 21600
S = L*170/100
S = 13600
Therefore, the cost of the Samsung mobile is Rs. 13600.