

Mindtree Aptitude Questions and Answers with Explanation



1. 8 4.5 5.5 13 56 ?

- A. 456
- B. 436
- C. 526
- D. 556

Answer – A. 456

Explanation:

$$8 \times 0.5 + 0.5 = 4.5$$

$$4.5 \times 1 + 1 = 5.5$$

$$5.5 \times 2 + 2 = 13$$

$$13 \times 4 + 4 = 56$$

$$\text{Therefore, } 56 \times 8 + 8 = 456$$

2. 15 , 22, 72, 552 , ?

- A. 4500
- B. 4592
- C. 4763
- D. 8800

Answer – D. 8800

Explanation:

$$15 \times 2 - 8 = 22$$

$$22 \times 4 - 16 = 72$$

$$72 \times 8 - 24 = 552$$

$$552 \times 16 - 32 = 8800$$

3. 1650, ?, 50, 9.5, 1.17, -0.415

- A. 270
- B. 560
- C. 750
- D. 1050

Answer – A. 270

Explanation:

$$1650/6 - 5 = 275 - 5 = 270$$

$$270/5 - 4 = 54 - 4 = 50$$

$$50/4 - 3 = 12.5 - 3 = 9.5$$

$$9.5/3 - 2 = 3.17 - 2 = 1.17$$

$$1.17/2 - 1 = 0.585 - 1 = -0.415$$

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4. ?, 104, 41.6, 24.96, 19.97

- A. 350
- B. 370
- C. 520
- D. 630

Answer – C. 520

Explanation:

$$520 \times \frac{1}{5} = 104$$

$$104 \times \frac{2}{5} = 41.6$$

$$41.6 \times \frac{3}{5} = 24.96$$

$$24.96 \times \frac{4}{5} = 19.97$$

5. 5 12 33 136 675 ?

- A. 3850
- B. 3950
- C. 3460
- D. 4056

Answer – D. 4056

Explanation:

$$5 * 2 + 2 = 12$$

$$12 * 3 - 3 = 33$$

$$33 * 4 + 4 = 136$$

$$136 * 5 - 5 = 675$$

$$\text{Therefore, } 675 * 6 + 6 = 4056.$$

6. By selling 15 oranges, a fruit seller gains the selling price of 1 orange. Calculate his gain percentage

- A. 6.14%
- B. 7.14%
- C. 8%
- D. 8.41%

Answer – B. 7.14%

Explanation:

$$\text{Selling Price of 1 orange} = 1$$

$$\text{Then, Selling Price of 15 orange will be} = 15$$

$$\text{Profit} = 1$$

$$\text{CP} = 15 - 1 = 14$$

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$$\text{Profit \%} = (1/14) \times 100 = 7.14\%$$

7. Ravi bought 30 liters of milk at the rate of Rs.8 per liter. He got it churned after spending Rs.10 and 5kg of cream and 30 liters of toned milk was obtained. If he sold the cream at Rs.30 per kg and toned milk at Rs.4 per liter, his profit in the transaction is:

- A. 8%
- B. 20%
- C. 30%
- D. 40%

Answer – A. 8%

Explanation:

$$\text{CP} = \text{Rs.}(30 \times 8 + 10) = \text{Rs.}250$$

$$\text{SP} = \text{Rs.}(30 \times 5 + 30 \times 4) = \text{Rs.}270$$

$$\text{Gain\%} = (20/250 \times 100)\% = 8\%$$

8. The sale price of an article including the sale tax is Rs. 616. The rate of sale tax is 10 %. If the shopkeeper has made a profit of 12%, the cost price of the article is

- A. Rs 500
- B. Rs 515
- C. Rs 550
- D. Rs 600

Answer – A. Rs 500

Explanation:

$$110\% \text{ of S.P} = 616$$

$$\text{Then, S.P.} = \text{Rs.}(616 \times 100/110) = \text{Rs.}560.$$

$$\text{C.P.} = \text{Rs} (100/112 \times 560)$$

$$= \text{Rs } 500$$

9. Prasanth drove at the speed of 45 kmph. From home to a resort. Returning over the same route, he got stuck in traffic and took an hour longer, also he could drive only at the speed of 40 kmph. How many kilometers did he drive each way?

- A. 360 km
- B. 420 km
- C. 480 km
- D. 720 km

Answer – A. 360 km

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Explanation:

According to the given data

$$x/40 - x/45 = 1$$

$$9x - 8x/360 = 1$$

$$x/360 = 1$$

$$x = 360 \text{ km}$$

10. **Walking at the rate of 4 kmph a man covered a certain distance in 2hrs 30min. Running at a speed of 17.5 kmph the man cover the same distance in how many mins?**

- A. 19 min
- B. 26 min
- C. 34 min
- D. 42 min

Answer – C. 34 min

Explanation:

$$4 \cdot (2 + 30/60) = 4 \cdot 2.5 = 10 \text{ km}$$

$$17.5 \text{ kmph then } T = 10/17.5 = 100/175$$

$$= 20/35 = 4/7$$

$$\text{Time} = 4 \cdot 60/7 = 34 \text{ min}$$

11. **Hemanth has to travel from one point to another point at a certain time. Traveling at a speed of 6 kmph he reaches 40 m late and traveling at a speed of 8 kmph he reaches 12 m earlier. What is the distance between these two points?**

- A. 15 km
- B. 18 km
- C. 21 km
- D. 27 km

Answer – C. 21 km

Explanation:

$$D/6 - 40/60 = d/8 + 12/60$$

$$d/6 - d/8 = 12/60 + 40/60$$

$$(8-6)d/48 = 52/60$$

$$2d/48 = 52/60$$

$$D = 52 \cdot 48/60 \cdot 2 = 20.8 = 21 \text{ km}$$

12. **The present age of Husband and Wife is 28 and 24 Years respectively. At that age, twin babies were born to them. After how many years the average of the family will be the same as before babies were born?**

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- A. 10 Years
- B. 11 Years
- C. 12 Years
- D. 13 Years

Answer – D. 13 Years

Explanation:

According to the given data

$$28+24/2 = 26 = (28+x+24+x+2x)/4$$

$$104 = (52+4x)$$

$$x = 13$$

13. A can do a work in 32 days. B who is 60 percent more efficient than A. Find how much time they will take together to do the same work?

- A. 150/13 days
- B. 160/13 days
- C. 170/3 days
- D. 190/3 days

Answer – B. 160/13 days

Explanation:

A's one-day work = $1/32$

Therefore, B one day work = $(160/100) * 1/32 = 1/20$

Then, B will take 20 days to complete the work.

So Both A and B will take = $(32 * 20) / 52 = 160/13$ days

Hence it is proved.

14. 50 men could complete work in 200 days. They worked together for 150 days, after that due to bad weather the work is stopped for 25 days. How many more workers should be employed so as to complete the work in time?

- A. 25
- B. 35
- C. 50
- D. 60

Answer – C. 50

Explanation:

Let additional workers be P

Then, $(50 * 150) / (50 * 200) = 3/4$ of the work is already completed and now only $1/4$ of the work is to be done.

Therefore, $1/4 = ((50 + P) * 25) / 50 * 200$, solve for p, we get P = 50

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Hence, more workers should be employed so as to complete the work in time = 50

15. Abhishek 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. 1: 2
- B. 2: 1
- C. 2: 3
- D. 3: 1

Answer - B. 2: 1

Explanation:

speed downstream = x kmph

Speed upstream = $3x$ kmph

$(3x+x)/2 : (3x-x)/2$

$4x/2 : 2x/2 = 2: 1$

16. A boat can travel 4.2 km upstream in 14 min. If the ratio of the speed of the boat in still water to the speed of the stream is 7:1. How much time will the boat take to cover 17.6 km downstream?

- A. 32 min
- B. 48 min
- C. 56 min
- D. 44 min

Answer - D. 44 min

Explanation:

Speed = $7x: x$

Downstream = $8x$; upstream = $6x$

Upstream speed = $4.2 \cdot 60 / 14 = 18$ kmph

$6x = 18$

$x = 3$

Downstream = $8 \cdot 3 = 24$

Time taken for 17.6 km = $17.6 \cdot 60 / 24 = 44$ min

17. A man can row at 4 kmph in still water. If the velocity of the current is 1 kmph and it takes him 1 hour to row to a place and come back. how far is that place?

- A. 1.5 km
- B. 1.8 km
- C. 2.6 km

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D. 3.2 km

Answer - B. 1.8 km

Explanation:

Let the distance is x km

Rate downstream = $4 + 1 = 5$ kmph

Rate upstream = $4 - 1 = 3$ kmph

then

$$x/5 + x/3 = 1$$

$$3x + 5x = 15$$

$$x = 15/8 = 1.8 \text{ km}$$

18. 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. 308 km

B. 316 km

C. 342 km

D. 356 km

Answer - A. 308 km

Explanation:

The velocity of the stream = 2 kmph

The 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

$$x/17 + (x/2)/13 = 30$$

$$x/17 + x/26 = 30$$

$$43x/442 = 30$$

$$x = 30 \cdot 442 / 43 = 308.37 = 308 \text{ km}$$

the distance between A and B = 308 km

20. Varun got 5000 as his share out of the total profit of 9000. Dhaval had invested 3000 rupees for 6 months while Varun invested for the whole year. Find the amount invested by Varun.

A. 1875

B. 1975

C. 2125

D. 2275

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Answer – A. 1875

Explanation:

Amount invested by Varun = P

12 P: 3000*6

P:1500

So Varun share = $[p/(1500+p)]*9000 = 5000$

$P = 75*25 = 1875$

Therefore, Amount invested by Varun is 1875

20. A and B invested in a business in which A invest 250 rupee more than B. B invested for 6 months while A invested for 4 months. If A gets 200 more than B out of a total profit of 1000. Then the total amount invested in the business.

A. 550

B. 650

C. 750

D. 850

Answer – B. 650

Explanation:

Let B invest 'x' rupees so A will invest (x+250)

Total investment made by A = (x+250)*4 and by B = 6x

According to the problem- $[[4(x+250) - 6x]/(1000+ 10x)]*1000 = 200.$

$X = 200.$ Total investment = 200+250+200 = 650

21. The average temperature in Delhi for the first four days of the month was reported as 58 degrees. It reported as 60 degrees for 2nd, 3rd, 4th and 5th days. The ratio of the temperatures of 1st and 5th day was 7: 8. Find the temperature on the first day.

A. 42 degrees

B. 46 degrees

C. 56 degrees

D. 68 degrees

Answer - C. 56 degrees

Explanation:

$A+B+C+D = 58*4$

$B+C+D+E = 60*4$

Subtract both, $E-A = 8$

So $8x - 7x = 8, x = 8$

So temperature of A(1st day) = $7x = 7*8 = 56$ degrees

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22. In a group of 8 boys, 2 men aged at 21 and 23 were replaced, two new boys. Due to this the average cost of the group increased by 2 years. What is the average age of the 2 new boys?

- A. 17
- B. 28
- C. 23
- D. 30

Answer - D. 30

Explanation:

Average of 8 boys increased by 2, this means the total age of boys increased by $8 \times 2 = 16$ yrs

So sum of ages of two new boys = $21 + 23 + 16 = 60$

Average of these = $60/2 = 30$

23. One year ago the ratio between Rahul salary and Rohit salary is 4:5. The ratio between their individual salary of the last year and the current year is 2:3 and 3:5 respectively. If the total current salary of Rahul and Rohit is 4300. Then find the current salary of Rahul.

- A. 1200
- B. 1800
- C. 1600
- D. 2000

Answer – B. 1800

Explanation:

$4x$ and $5x$ is the last year salary of Rahul and Rohit respectively

Rahul last year to Rahul current year = $2/3$

Rohit last year to Rohit current year = $3/5$

Current of Rahul + current of Rohit = 4300

$(3/2) \times 4x + (5/3) \times 5x = 4300.$

$X = 300.$

So rahul current salary = $3/2 \times 4 \times 300 = 1800$

24. A bag contains 25p coins, 50p coins and 1 rupee coins whose values are in the ratio of 8:4:2. The total values of coins are 840. Then find the total number of coins

- A. 260
- B. 280
- C. 220
- D. 240

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Answer – B. 280

Explanation:

Value is given in the ratio 8:4:2.

$$(8x/0.25) + (4x/0.5) + (2x/1) = 840.$$

$$X = 20. \text{ Total amount} = 14 * 20 = 280$$

25. Two vessels contain an equal quantity of solution contains milk and water in the ratio of 7:2 and 4:5 respectively. Now the solutions are mixed with each other then find the ratio of milk and water in the final solution?

A. 11:5

B. 11:6

C. 11:7

D. 11:9

Answer – C. 11:7

Explanation:

milk = 7/9 and water = 2/9 – in 1st vessel

milk = 4/9 and water = 5/9 – in 2nd vessel

$$(7/9 + 4/9) / (2/9 + 5/9) = 11:7$$