

Sony Aptitude Questions and Answers with Explanation



1. 4 11 34 ? 484 2435

- A. 112
- B. 117
- C. 132
- D. 115

Answer – B. 117

Explanation:

According to the given series 4 is the first one, then to get 11 the following procedure

$$4 * 1 + 7 * 1 = 11$$

$$11 * 2 + 6 * 2 = 34$$

$$34 * 3 + 5 * 3 = 117$$

2. 5 11 20 43 82 ?

- A. 169
- B. 170
- C. 171
- D. 172

Answer – A. 169

Explanation:

$$5 * 2 + 1 = 11$$

$$11 * 2 - 2 = 20$$

$$20 * 2 + 3 = 43$$

$$43 * 2 - 4 = 82$$

$$82 * 2 + 5 = 169$$

3. 3, 11, 47, 183, ?, 2947

- A. 775
- B. 770
- C. 765
- D. 739

Answer – D. 739

Explanation:

$$3 * 4 - 1 = 11$$

$$11 * 4 + 3 = 47$$

$$47 * 4 - 5 = 183$$

$$183 * 4 + 7 = 739$$

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$$739 * 4 - 9 = 2947$$

4. The ratio of the present ages of A to B is 5: 3. The ratio of A's age 4 years ago to B's age 4 years hence is 1: 1. What is the ratio of A's age 4 years hence to B's age 4 years ago?

- A. 3: 1
- B. 3: 2
- C. 5: 2
- D. 2: 3

Answer - A. 3: 1

Explanation:

Let us assume A's present age = $5x$, and B's = $3x$

The ratio of A's age 4 years ago to B's age 4 years hence is 1: 1. So

$$(5x-4)/(3x+4) = 1/1$$

Solve $x = 4$

So A's present age = 20, and B's = 12

Required ratio = $(20+4): (12-4) = 24: 8 = 3: 1$

5. Age of P is three times the sum of ages of Q and R. 5 years hence, A's age will be twice the sum of ages of Q and R. The total of their present ages is

- A. 30
- B. 45
- C. 60
- D. 65

Answer - C. 60

Explanation:

Let $(Q+R)$'s present age = x

Then P's present age = $3x$

After 5 years, $(3x+5) = 2*(x+5+5)$

Solve, $x = 15$

Sum = $x+3x = 4x = 4 (15) = 60$

6. At present, the respective ratio between the ages of A and B is 3:4 and that between A and C is 1:2. six years hence, the sum of A, B and C will be 96 years. what is the present age of A?

- A. 12 years
- B. 18 years

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- C. 19 years
- D. 24 years

Answer – B. 18 years

Explanation:

The ratio between A, B and C is = 3:4:6

The sum of present age of A,B and C = $96 - 18 = 78$

$$13x = 78$$

$$x = 6$$

Present age of A = $3x = 18$

Therefore, the present age of A is 18 years

7. 5 years ago the average age of a family of four members was 40 years. Two children were born in this span of 15 years. The present average of the family remains unchanged. Among the two children who were born during the 15 years, if the older child at present is 8 years older than the younger one, what is the ratio of the present age of the older child to the present age of the younger Child?

- A. 7: 3
- B. 7: 6
- C. 9: 4
- D. 9: 5

Answer – A. 7: 3

Explanation:

According to the given data

15 years ago the total age of a family of four members = 160

Sum of the present age of a family of four members = $160 + (15 \times 4) = 220$

Sum of the present age of a family of six members = $40 \times 6 = 240$

$$x+x+8 = 20$$

$$x=6$$

Hence, the present age of the older child to the present age of the younger Child = $14:6 = 7:3$

8. The present age of Swapna is one-fourth that of her father. After 6 years, the father's age will be twice the age of Naveen. If Naveen celebrated the fifth birthday 8 year ago, What is the Swapna's Present age?

- A. 3 years
- B. 5 years
- C. 7 years
- D. 8 years

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Answer – D. 8 years

Explanation:

Naveen's present age = $8 + 5 = 13$

Naveen's age after 6 years = $13 + 6 = 19$

Naveen's father age = $2 * 19 = 38$

Father's present age = 32

Therefore, Swapna's present age = $32 / 4 = 8$

9. A boat covers a certain distance downstream in 2 hours, while it comes back in 2 1/2 hours. If the speed of the stream be 5 kmph, what is the speed of the boat in still water?

- A. 30 kmph
- B. 35 kmph
- C. 40 kmph
- D. 45 kmph

Answer – D. 45 kmph

Explanation:

Let the speed of the boat in still water be x kmph. Then,

Speed downstream = $(x + 5)$ kmph,

Speed upstream = $(x - 5)$ kmph.

$$(x + 5) * 2 = (x - 5) * 5/2$$

$$X = 45 \text{ kmph}$$

10. A man can row 8 km/hr in still water. When the river is running at 4 km/hr, it takes him 2 1/3hr to row to a place and comes back. How far is the place?

- A. 4 km
- B. 5 km
- C. 7 km
- D. 10 km

Answer – C. 7 km

Explanation:

Downstream speed = $8+4= 12 \Rightarrow a$

Upstream speed = $8-4= 4 \Rightarrow b$

Distance = $a*b/(a+b) * \text{total time (t)}$

$$= 12*4/16 * 7/3$$

$$= 7 \text{ km}$$

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11. The area of a rectangle gets reduced by 9 square units, if its length is reduced by 5 units and breadth is increased by 3 units. If we increase the length by 3 units and breadth by 2 units, then the area is increased by 67 square units. Find the length and breadth of the rectangle.

- A. 14m, 7m
- B. 15m, 9m
- C. 17m, 9m
- D. 16m, 7m

Answer – C. 17m, 9m

Explanation:

Let us assume

Length = x; Breadth = y

$$xy - (x-5)(y+3) = 9$$

$$3x - 5y - 6 = 0 \text{ ---- (a)}$$

$$(x+3)(y+2) - xy = 67$$

$$2x + 3y - 61 = 0 \text{ ----- (b)}$$

solving (a) & (b)

$$x = 17m ; y = 9m$$

12. The perimeter of a square is equal to twice the perimeter of a rectangle of length 8 cm and breadth 7 cm. What is the circumference of a semicircle whose diameter is equal to the side of the square ?

- A. 23.57 cm
- B. 38.57 cm
- C. 42.46 cm
- D. 47.47 cm

Answer – B. 38.57 cm

Explanation:

Perimeter of square = 2 x Perimeter of rectangle

$$= 2 * 2 (8+7) = 60 \text{ cm.}$$

Side of square = $60/4 = 15 \text{ cm} = \text{Diameter of semi-circle}$

Circumference of semi-circle = $\pi d/2 + d$

$$= (22/7) * 2 * 15 + 15 = 38.57 \text{ cm}$$

13. Mahesh and Sumanth entered into a partnership investing Rs. 10000 and Rs. 8000 rep. After 3 months Umesh joined them with an investment of Rs.12000. What is the share of Sumanth in a half-yearly profit of Rs 7200?

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- A. Rs. 2000
- B. Rs. 2400
- C. Rs. 3200
- D. Rs. 4000

Answer - B. Rs. 2400

Explanation:

$$10000*6: 8000*6: 12000*3$$

$$10*6: 8*6: 12*3$$

$$60: 48: 36$$

$$5: 4 : 3$$

$$\text{Suresh profit} = 7200*4/12 = 2400$$

14. P, Q, and R started a shop by investing Rs. 27000, Rs. 48000 and Rs. 63000 respectively. At the end of the year, the profits were distributed among them. If Q's share of profit be Rs.19200, then the total profit was

- A. Rs. 52000
- B. Rs. 52550
- C. Rs. 55000
- D. Rs. 55200

Answer - D. Rs. 55200

Explanation:

$$P: Q: R = 27:48:63 = 9:16:21$$

$$16x/46 = 19200$$

$$X = 19200*46/16 = 55200$$

15. A and B started a partnership business investing some amount in the ratio of 3: 5. C joined them after six months with an amount equal to that of B. In what proportion should the profit at the end of one year be distributed among A, B & C?

- A. 5: 8: 10
- B. 6: 10: 5
- C. 6: 4: 10
- D. 10: 6: 3

Answer – B. 6: 10: 5

Explanation – Let the initial investments of A & B be 3a and 5a.

$$A: B: C = (3a \times 12) : (5a \times 12) : (5a \times 6) = 36 : 60 : 30 = 6 : 10 : 5.$$