

## AVERAGES TEST - 1

- The average of 5 numbers is 306.4. The average of the first two numbers is 431 and the average of the last two numbers is 214.5. what is the third number ?
 

(1) 108      (2) 52      (3) 321  
     (4) Cannot be determined      (5) None of these
- Kamlesh bought 65 books for Rs. 1,050 from one shop and 50 books for Rs. 1,020 from another. What is the average price he paid per book ?
 

(1) Rs. 36.40      (2) Rs. 18.20      (3) Rs. 24  
     (4) Rs. 18      (5) None of these
- The sum of five numbers is 290. The average of first two numbers is 48.5 and the average of last two numbers is 53.5.what is the third number?
 

(1) 72      (2) 84      (3) 96      (4) 108      (5) None of these
- The average weight of a group of 53 girls was calculated as 58 kgs. It was later discovered that the weight of one of the girls was read as 65 kgs. Whereas her actual weight was 45 kgs.What is the actual average weight of the group of 53 girls ? (rounded off to two digits after decimal)
 

(1)58.62 kgs      (2) 58.37kgs      (3) 57.37 kgs  
     (4) 57.62kgs
- The average marks in science subject of a class of 20 students is 68. If the marks of two students were misread as 48 and 65 of the actual marks 72 and 61 respectuallly. Then what would be the correct average ?
 

(1) 68.5      (2) 69      (3) 69.5      (4)70      (5) 66
- The average age of the family of five members is 24. If the present age of youngest member is 8 years, then what was the average age of the family at the time of the birth of the youngest member ?
 

(1) 20 years      (2) 16 years      (3) 12 years  
     (4) 18 years      (5) 21 years
- The average of 5 numbers is 65. The average of the first two numbers is 81 and the average of the last two numbers is 38. What is the third number ?
 

(1) 63      (2) 87      (3) 99  
     (4) Cannot be determined      (5) None of these
- The total marks obtained by a student in Physics , Chemistry and Mathematics together is 120 more than the marks obtained by him in Chemistry. What are the average marks obtained by him in Physics and Mathematics together ?
 

(1) 60      (2) 120      (3) 40  
     (4) Cannot be determined      (5) None of these
- The average age of 80 boys in a class is 15 years. The average age of a group of 15 boys in the class is 16 years and the average age of another 25 boys in the class is 14 years. What is the average age of the remaining boys in the class?
 

(1) 15.25 years      (2) 14 years      (3) 14.75 years  
     (4) Cannot be determined      (5) None of these
- The average age of the seven boys sitting in a row facing North is 26 years. If the average age of the first three boys is 19 years and the average age of last three boys is 32 years, what is the age of the boy who is sitting in middle of the row ?
 

(1) 28 years      (2) 29 years      (3) 24 years  
     (4) 31 years      (5) None of these

- Rams present age is three times his son's present age and two fifth of his father's present age.The averages of the present ages of all of them is 46 years. What is the difference between the Ram's sons present age and Ram's father's present age ?
 

(1) 68 years      (2) 88 years      (3) 58 years  
     (4) Cannot be determined      (5) None of these
- The average of five numbers is 56. If the average of the first four numbers is 54. What is the value of the fifth number ?
 

(1) 68      (2) 72      (3) 56      (4) 64      (5) None of these
- The average weight of 45 students in a class was calculated as 36 kg. it was later found that the weight of two students in the class was wrongly calculated.The actual weight of one of the boys in the class was 32 kg , but it was calculated as 34 kg , and the weight of another boy in the class was 45 kg.;whereas it was calculated as 40 kg.what is the actual average weight of the 45 students in the class ? (Rounded off to two-digits after decimal )
 

(1) 36.07 kg.      (2) 36.16 kg      (3) 35.84 kg  
     (4) Cannot be determined      (5) None of these
- Seema's present age is four times her son's age and four seventh of her father's present age. The average of the present ages of all three of them is 32 years.what is the difference between the Seema's son's present age and Seema's father's present age ?
 

(1) 44 years      (2) 48 years      (3) 46 years  
     (4) Cannot be determined      (5) None of these
- The sum of eight consecutive even numbers of set-A is 376.What is the sum of different set of five consecutive numbers whose lowest number is 15 more than the mean of set-A ?
 

(1) 296      (2) 320      (3) 324      (4) 284      (5) None of these
- Average score of Rahul, Manish and Suresh is 68.Rahul's score is 15 less than Ajay and 10 more than Manish. If Ajay scored 30 marks more than the average score of Rahul, Manish and Suresh, what is the sum of Manish's and Suresh's scores ?
 

(1) 120      (2) 111      (3) 117  
     (4) Cannot be determined      (5) None of these
- The sum of 8 consequetive odd numbers is 656. Also average of four consequetive even numbers is 87. What is the sum of the smallest odd numbers and second largest even number ?
 

(1) 165      (2) 175      (3) 163  
     (4) Cannot be determined      (5) None of these
- The average marks in English subject of a class of 24 students is 56. If the marks of three students were misread as 44, 45 and 61 of the actual marks 48, 59 and 67 respectively. then what would be the correct Average ?
 

(1) 56      (2) 55      (3) 57.5      (4) 58.5      (5) None of these
- Amit's present age is three times prathiba's present age and nine-thirteenth of his father's present age. The sum of the present age of all of them is 150 years. What is the difference between prathiba's present age and Amith's father's present age ?
 

(1) 56 years      (2) 64 years      (3) 60 years  
     (4) Cannot be determined      (5) None of these

20. Farah was married 8 years ago. Today her age is  $1\frac{2}{7}$  times to that at the time of marriage. At present her daughter's age is  $\frac{1}{6}$ th of her age. What was her daughter's age 3 years ago?  
 (1) 6 years (2) 7 years (3) 3 years  
 (4) Cannot be determined (5) None of these

21. The average of four consecutive even numbers P, Q, R and S respectively ( in increasing order ) is 51. What is the product of P and R ?  
 (1) 2592 (2) 2400 (3) 2600  
 (4) 2808 (5) None of these

22. The average height of 27 persons was recorded as 162 cm. if the height of Shreyas was deleted from the observation, the average height reduced by 1 cm. what was Shreyas's height ?  
 (1) 184 cm (2) 226 cm (3) 179 cm  
 (4) 186 cm (5) None of these

23. The average of 9 consecutive positive integers is 63. The product of the largest and smallest integers is  
 (1) 3935 (2) 3953 (3) 3853 (4) 3835 (5) 3635

24. The present age of Romila is one fourth of that of her father. After 6 years the father's age will be twice the age of Kapil. If Kapil celebrated fifth birthday 8 years ago, what is Romila's present age ?  
 (1) 7 years (2) 7.5 years (3) 8 years  
 (4) 8.5 years (5) None of these

25. The average height of 16 students is 142 cm. if the height of the teacher is included, the average height increases by 1 cm. The height of the teacher is  
 (1) 156 cm (2) 159 cm (3) 158 cm (4) 157 cm (5) 159.5 cm

26. If the ages of P and R are added to twice the age of Q, the total become 59; if the ages of Q and R are added to thrice age of P, the total becomes 68 and if the age of P is added to thrice the age of Q and thrice the age of R, the total becomes 108.what is the age of P ?  
 (1) 15 years (2) 19 years (3) 17 years (4) 12 years  
 (5) None of these

27. The product of the ages of Harish and Seema is 240. If twice the age of Seema is more than Harish's age by 4 years, what is Seema's age in years ?  
 (1) 12 years (2) 20 years (3) 10 years (4) 14 years  
 (5) None of these

28. Of the three numbers, the average of the first and the second is greater than the average of the second and third by 15.what is the difference between the first and third of the three numbers ?  
 (1) 15 (2) 45 (3) 60 (4) Data inadequate (5) None of these

29. In Arun's opinion his weight is greater than 65 kg but less than 72 kg. His brother does not agree with Arun and he thinks that Arun's weight is greater than 60 kg but less than 70 kg. His mother's view is that his weight cannot be greater than 68 kg. If all of them are correct in their estimation. What is the average of different probably weights of Arun ?  
 (1) 69 kg (2) 67 kg (3) 68 kg  
 (4) Data inadequate (5) None of these

30. Average weight of three boys P, T and R is  $54\frac{1}{3}$  kgs while the average weight of three boys, T, F and G is 53 kgs. What is the average weight of P, T, R, F and H ?  
 (1) 53.8 kgs (2) 52.4 kgs (3) 53.2 kgs  
 (4) Data inadequate (5) None of these

31. Present age of Rahul is 5 years less than Ritu's present age. If 3 years ago Ritu's age was x, which of the following represents Rahul's present age ?  
 (1)  $x+3$  (2)  $x-2$  (3)  $x-3+8$   
 (4)  $x+3+8$  (5) None of these

32. The average weight of a group of 75 girls was calculated as 47 kgs. It was later discovered that the weight of one of the girls was read as 45 kgs., whereas her actual weight was 25 kgs. What is the actual average weight of the group of 75 girls ? ( Rounded off to two digits after decimal )  
 (1) 46.73 kgs (2) 46.64 kgs (3) 45.96 kgs  
 (4) Cannot be determined (5) None of these

33. The difference between the present ages of Arun and Deepak is 14 years. Seven years ago the ratio of their ages was 5:7 respectively.what is Deepak's present age?  
 (1) 49 years (2) 42 years (3) 63 years  
 (4) 35 years (5) None of these

34. The average age of 80 girls was 20 years, the average age of 20 of them was 22 years and that of another 20 was 24 years. Find the average age of the remaining girls ?  
 (1) 17 years (2) 19 years (3) 21 years  
 (4) 15 years (5) None of these

35. The average of the ages of Sumit, Krishna and Rishabh is 43 years and the average of the ages of Sumit, Rishabh and Rohit is 49 years. If Rohit is 54 years old, what is Krishna's age ?  
 (1) 45 years (2) 24 years (3) 36 years  
 (4) Cannot be determined (5) None of these

36. Father's age is 30 years more than the son's age. Ten years hence the father's age will become three times the son's age that time. What is son's present age in years?  
 (1) 8 (2) 7 (3) 5  
 (4) Cannot be determined (5) None of these

37. The number of heat wave days in the Indian sub continent in 1995 was 29 and the deaths due to heat wave were 406. What was the average of deaths per heat wave day in 1995 ?  
 (1) 12 (2) 13 (3) 14 (4) 15

38. If twelve years hence a man is going to be  $1\frac{1}{3}$  his age twelve years ago. What is the present age ?  
 (1) 24 years (2) 72 years (3) 96 years  
 (4) 84 years

39. Average weight of three boys P, T and R is  $54\frac{1}{3}$  kgs while the average weight of three boys , T, F and G is 53 kgs.What is the average weight of P, T, R, F and H ?  
 (1) 53.8 kgs (2) 52.4 kgs (3) 53.2 kgs  
 (4) Data inadequate (5) None of these

40. The mean temperature of Monday to Wednesday was  $37^{\circ}\text{C}$  and of Tuesday to Thursday was  $34^{\circ}\text{C}$  . If the temperature on Thursday was  $4/5^{\text{th}}$  that of Monday, then what was the temperature on Thursday ?  
 (1)  $36.5^{\circ}\text{C}$  (2)  $36^{\circ}\text{C}$  (3)  $35.5^{\circ}\text{C}$   
 (4)  $34^{\circ}\text{C}$

**Answers:**

1.

**Given:**

Average of 5 numbers = 306.4

Total sum =  $306.4 \times 5$

= 1532

Average of first two = 431

Sum of first two =  $431 \times 2 = 862$

Average of last two = 214.5

Sum of last two =  $214.5 \times 2 = 429$

Let the third number = x

So,

$862 + x + 429 = 1532$

$x = 1532 - 1291$

x = 241

241 is not in the options.

👉 **Correct Answer: (5) None of these**

2.

Books bought:

65 books → ₹1050

50 books → ₹1020

Total books =  $65 + 50 = 115$

Total cost =  $1050 + 1020 = 2070$

Average price per book =  $2070 \div 115 = ₹18$

👉 **Correct Answer: (4) Rs. 18**

3.

Total sum of five numbers = 290

Average of first two = 48.5

Sum of first two =  $48.5 \times 2 = 97$

Average of last two = 53.5

Sum of last two =  $53.5 \times 2 = 107$

Let the third number = x

$97 + x + 107 = 290$

$x = 290 - 204$

x = 86

86 is not in the options.

👉 **Correct Answer: (5) None of these**

4.

Wrong average = 58

Number of girls = 53

Wrong total =  $58 \times 53$

= 3074

One girl's weight was read as 65 kg

Actual weight = 45 kg

Correction =  $45 - 65 = -20$

Correct total =  $3074 - 20$

= 3054

Correct average =  $3054 \div 53$

= 57.62 kg

👉 **Correct Answer: (4) 57.62 kgs**

5.

Wrong average = 68

Students = 20

Wrong total =  $68 \times 20$

= 1360

Misread marks:

Read: 48 and 65 → total = 113

Actual: 72 and 61 → total = 133

Correction =  $133 - 113$

= 20

Correct total =  $1360 + 20$

= 1380

Correct average =  $1380 \div 20$

= 69

👉 **Correct Answer: (2) 69**

6.

**Given:**

Average age of 5 members = 24

Total present age =  $24 \times 5$

= 120 years

Youngest member's present age = 8 years

At the time of birth of youngest (8 years ago), every member was 8 years younger.

Reduction in total age =  $8 \times 5 = 40$

Total age 8 years ago =  $120 - 40$

= 80

Average age at that time =  $80 \div 5$

= 16 years

👉 **Correct Answer: (2) 16 years**

7.

Average of 5 numbers = 65

Total sum =  $65 \times 5$

= 325

Average of first two = 81

Sum of first two =  $81 \times 2 = 162$

Average of last two = 38

Sum of last two =  $38 \times 2 = 76$

Let the third number = x

$162 + x + 76 = 325$

$x = 325 - 238$

x = 87

👉 **Correct Answer: (2) 87**

8.

Let Chemistry marks = C

Given:

Physics + Chemistry + Mathematics = C + 120

So,

$P + C + M = C + 120$

Cancel C from both sides:

$P + M = 120$

Average of Physics and Mathematics =  $120 \div 2$

= 60

👉 **Correct Answer: (1) 60**

9.

Average age of 80 boys = 15

Total age =  $80 \times 15$

= 1200

First group:

15 boys, average = 16

Sum =  $15 \times 16 = 240$

Second group:

25 boys, average = 14

Sum =  $25 \times 14 = 350$

Total boys considered =  $15 + 25 = 40$

Remaining boys =  $80 - 40 = 40$

Remaining sum =  $1200 - (240 + 350)$

=  $1200 - 590$

= 610

Average of remaining =  $610 \div 40$

= 15.25 years

👉 **Correct Answer: (1) 15.25 years**

10.

Average of 7 boys = 26

Total age =  $7 \times 26$   
= **182**

First 3 boys:

Average = 19  
Sum =  $19 \times 3 = 57$

Last 3 boys:

Average = 32  
Sum =  $32 \times 3 = 96$

Let middle boy's age = x

$57 + x + 96 = 182$

$x = 182 - 153$

$x = 29$

👉 **Correct Answer: (2) 29 years**

11.

Let son's present age = x

Ram's age = 3x

Ram's age is **2/5** of father's age

So,

$3x = (2/5)$  Father

Father =  $(5/2) \times 3x$

Father =  $15x/2 = 7.5x$

Average of all three = 46

Total age =  $46 \times 3 = 138$

So,

$x + 3x + 7.5x = 138$

$11.5x = 138$

$x = 12$

Son's age = 12

Father's age =  $7.5 \times 12 = 90$

Difference =  $90 - 12 = 78$

78 is not in the options.

👉 **Correct Answer: (5) None of these**

12.

Average of 5 numbers = 56

Total =  $56 \times 5 = 280$

Average of first four = 54

Sum of first four =  $54 \times 4 = 216$

Fifth number =  $280 - 216$

= 64

👉 **Correct Answer: (4) 64**

13.

Wrong average = 36

Students = 45

Wrong total =  $36 \times 45$

= 1620

Corrections:

First boy:

Actual = 32

Wrong = 34

Difference = -2

Second boy:

Actual = 45

Wrong = 40

Difference = +5

Total correction =  $-2 + 5 = +3$

Correct total =  $1620 + 3$

= 1623

Correct average =  $1623 \div 45$

= **36.07 kg**

👉 **Correct Answer: (1) 36.07 kg**

14.

Let son's age = x

Seema's age = 4x

Seema is  $4/7$  of father's age

$4x = (4/7)$  Father

Father =  $7x$

Average = 32

Total age =  $32 \times 3 = 96$

$x + 4x + 7x = 96$

$12x = 96$

$x = 8$

Son = 8

Father =  $7 \times 8 = 56$

Difference =  $56 - 8 = 48$

👉 **Correct Answer: (2) 48 years**

15.

Sum of 8 consecutive even numbers = 376

Mean of set-A =  $376 \div 8$

= 47

Lowest number of new set =  $47 + 15$

= 62

Five consecutive numbers:

62, 63, 64, 65, 66

Sum =  $62 + 63 + 64 + 65 + 66$

= 320

👉 **Correct Answer: (2) 320**

16.

Average of Rahul, Manish, Suresh = 68

Total of three =  $68 \times 3 = 204$

Ajay scored 30 more than average of the three:

Ajay =  $68 + 30 = 98$

Rahul is 15 less than Ajay:

Rahul =  $98 - 15 = 83$

Rahul is 10 more than Manish:

Manish =  $83 - 10 = 73$

Now,

Rahul + Manish + Suresh = 204

$83 + 73 + \text{Suresh} = 204$

Suresh =  $204 - 156$

Suresh = 48

Sum of Manish and Suresh =  $73 + 48$

= 121

121 is not in the options.

👉 **Correct Answer: (5) None of these**

17.

Sum of 8 consecutive odd numbers = 656

Average =  $656 \div 8 = 82$

So the middle number = 82

8 consecutive odd numbers around 82:

75, 77, 79, 81, 83, 85, 87, 89

Smallest odd = 75

Average of 4 consecutive even numbers = 87

So middle point = 87

Four even numbers:

84, 86, 88, 90

Second largest even = 88

Required sum =  $75 + 88$

= 163

👉 **Correct Answer: (3) 163**

18.

Wrong average = 56

Students = 24

Wrong total =  $56 \times 24$

= 1344

Misread marks:

$$44 + 45 + 61 = 150$$

Actual marks:

$$48 + 59 + 67 = 174$$

Correction =  $174 - 150$

$$= 24$$

Correct total =  $1344 + 24$

$$= 1368$$

Correct average =  $1368 \div 24$

$$= 57$$

57 is not in the options.

👉 **Correct Answer: (5) None of these**

**19.**

Let Prathiba's age =  $x$

Amit's age =  $3x$

Amit is  $9/13$  of father's age

$$3x = (9/13) \text{ Father}$$

$$\text{Father} = (13/9) \times 3x$$

$$\text{Father} = 13x/3$$

Total age = 150

$$x + 3x + 13x/3 = 150$$

Multiply by 3:

$$3x + 9x + 13x = 450$$

$$25x = 450$$

$$x = 18$$

Prathiba = 18

$$\text{Father} = (13 \times 18)/3 = 78$$

Difference =  $78 - 18$

$$= 60$$

👉 **Correct Answer: (3) 60 years**

**20.**

Let Farah's present age =  $x$

8 years ago (at marriage) =  $x - 8$

Given:

$$x = \frac{12}{7}(x - 8)$$

$$7x = 12x - 96$$

$$5x = 96$$

$$x = 19.2 \text{ years}$$

Daughter's present age =  $1/6$  of 19.2

$$= 3.2 \text{ years}$$

3 years ago =  $3.2 - 3 = 0.2 \text{ years}$

Not in options.

👉 **Answer: (5) None of these**

**21.**

Let the four consecutive even numbers be:

$$x-3, x-1, x+1, x+3$$

Average = 51

So  $x = 51$

Numbers:

$$48, 50, 52, 54$$

$$P = 48$$

$$R = 52$$

Product =  $48 \times 52 = 2496$

Not in options.

👉 **Answer: (5) None of these**

**22.**

Total height of 27 persons:

$$27 \times 162 = 4374$$

New average = 161

New total of 26 persons:

$$26 \times 161 = 4186$$

Height of Shreyas:

$$4374 - 4186 = 188 \text{ cm}$$

Not in options.

👉 **Answer: (5) None of these**

✓ **23**

Average of 9 consecutive integers = 63

Middle number = 63

Numbers:

$$59, 60, 61, 62, 63, 64, 65, 66, 67$$

Smallest = 59

Largest = 67

$$\text{Product} = 59 \times 67 = 3953$$

👉 **Answer: (2) 3953**

**24.**

Kapil celebrated 5th birthday 8 years ago

So Kapil's present age =  $5 + 8 = 13$

After 6 years:

Kapil = 19

Father after 6 years =  $2 \times 19 = 38$

Father now =  $38 - 6 = 32$

Romila =  $1/4$  of 32

$$= 8 \text{ years}$$

👉 **Answer: (3) 8 years**

**25.**

Total height of 16 students:

$$16 \times 142 = 2272$$

New average = 143

Total with teacher:

$$17 \times 143 = 2431$$

Teacher's height:

$$2431 - 2272 = 159 \text{ cm}$$

👉 **Answer: (2) 159 cm**

**26.**

Let ages be  $P, Q, R$

Given:

$$1. \quad P + R + 2Q = 59$$

$$2. \quad Q + R + 3P = 68$$

$$3. \quad P + 3Q + 3R = 108$$

**Step 1: Subtract (1) from (2)**

$$(Q + R + 3P) - (P + R + 2Q) = 68 - 59$$

$$3P - P + Q - 2Q = 9$$

$$2P - Q = 9(A)$$

**Step 2: Subtract (1) from (3)**

$$(P + 3Q + 3R) - (P + R + 2Q) = 108 - 59$$

$$Q + 2R = 49(B)$$

**Step 3: Solve**

From (A):

$$Q = 2P - 9$$

Substitute into (B):

$$(2P - 9) + 2R = 49$$

$$2R = 58 - 2P$$

$$R = 29 - P$$

Substitute Q and R into (1):

$$P + (29 - P) + 2(29 - P - 9) = 59$$

$$29 + 4P - 18 = 59$$

$$\begin{aligned}4P + 11 &= 59 \\4P &= 48 \\P &= 12\end{aligned}$$

👉 Answer: (4) 12 years

27

Let Seema's age = x

Harish's age = H

Given:

Product:

$$xH = 240$$

Twice Seema is 4 more than Harish:

$$\begin{aligned}2x &= H + 4 \\H &= 2x - 4\end{aligned}$$

Substitute:

$$\begin{aligned}x(2x - 4) &= 240 \\2x^2 - 4x - 240 &= 0\end{aligned}$$

Divide by 2:

$$x^2 - 2x - 120 = 0$$

Factor:

$$(x - 12)(x + 10) = 0$$

x = 12 (positive age)

👉 Answer: (1) 12 years

28

Let numbers be A, B, C

Given:

$$\frac{A + B}{2} - \frac{B + C}{2} = 15$$

Multiply by 2:

$$\begin{aligned}A + B - B - C &= 30 \\A - C &= 30\end{aligned}$$

Difference = 30

Not in options.

👉 Answer: (5) None of these

29

Conditions:

Arun:  $65 < \text{weight} < 72$

Brother:  $60 < \text{weight} < 70$

Mother: weight  $\leq 68$

Common possible integer weights:

66, 67, 68

Average:

$$\frac{66 + 67 + 68}{3} = 67$$

👉 Answer: (2) 67 kg

30

Average of P, T, R =  $54\frac{1}{3}$

$$\text{Total} = 54\frac{1}{3} \times 3 = 163$$

Average of T, F, G = 53

$$\text{Total} = 53 \times 3 = 159$$

We are asked average of P, T, R, F, H

But:

• H is not defined

• G disappears

• No relation between F and H given

Insufficient data.

👉 Answer: (4) Data inadequate

31

3 years ago Ritu's age = x

So Ritu's present age =  $x + 3$

Rahul is 5 years less than Ritu:

Rahul's present age =  $(x + 3) - 5$

$$= x - 2$$

👉 Answer: (2) x - 2

32

Wrong average = 47

Number of girls = 75

Wrong total =  $47 \times 75$

$$= 3525$$

One weight read as 45 instead of 25

Correction =  $25 - 45 = -20$

Correct total =  $3525 - 20$

$$= 3505$$

Correct average =  $3505 \div 75$

$$= 46.73 \text{ kg}$$

👉 Answer: (1) 46.73 kgs

33

Let present ages be A (Arun) and D (Deepak)

Given:

$$D - A = 14$$

7 years ago:

$$\frac{A - 7}{D - 7} = \frac{5}{7}$$

Cross multiply:

$$7(A - 7) = 5(D - 7)$$

$$7A - 49 = 5D - 35$$

$$7A - 5D = 14 \quad (1)$$

Also D = A + 14

Substitute:

$$7A - 5(A + 14) = 14$$

$$7A - 5A - 70 = 14$$

$$2A = 84$$

$$A = 42$$

$$D = 42 + 14 = 56$$

Not in options.

👉 Answer: (5) None of these

34

Total age of 80 girls:

$$80 \times 20 = 1600$$

First 20 girls:

$$20 \times 22 = 440$$

Next 20 girls:

$$20 \times 24 = 480$$

Total of 40 girls = 920

Remaining girls = 40

Remaining total =  $1600 - 920$

$$= 680$$

Average =  $680 \div 40$

$$= 17 \text{ years}$$

👉 Answer: (1) 17 years

35

Sumit + Krishna + Rishabh =  $43 \times 3 = 129$

Sumit + Rishabh + Rohit =  $49 \times 3 = 147$

Rohit = 54

So Sumit + Rishabh =  $147 - 54$

$$= 93$$

Now:

$$93 + Krishna = 129$$

**Krishna = 129 – 93**

$$= 36$$

👉 **Answer: (3) 36 years**

**✓ 36**

Let son's age =  $x$

Father =  $x + 30$

After 10 years:

Father =  $x + 40$

Son =  $x + 10$

Given:

$$x + 40 = 3(x + 10)$$

$$x + 40 = 3x + 30$$

$$10 = 2x$$

$$x = 5$$

👉 **Answer: (3) 5**

**✓ 37**

Deaths per day:

$$406 \div 29 = 14$$

👉 **Answer: (3) 14**

**✓ 38**

Let present age =  $x$

After 12 years =  $x + 12$

12 years ago =  $x - 12$

Given:

$$x + 12 = \frac{4}{3}(x - 12)$$

$$3x + 36 = 4x - 48$$

$$x = 84$$

👉 **Answer: (4) 84 years**

**✓ 39**

Same as Question 30

H not defined

Insufficient data.

👉 **Answer: (4) Data inadequate**

**✓ 40**

Let Monday =  $M$

Thursday =  $T$

Given:

$$T = \frac{4}{5}M$$

Monday–Wednesday average = 37

$$M + T + W = 111$$

Tuesday–Thursday average = 34

$$T + W + Th = 102$$

Subtract:

$$(M + T + W) - (T + W + Th) = 9$$

$$M - Th = 9$$

Substitute:

$$M - (\frac{4}{5}M) = 9$$

$$\frac{1}{5}M = 9$$

$$M = 45$$

$$T = \frac{4}{5} \times 45 = 36$$

👉 **Answer: (2) 36 °C**