

8 years ago	5	36	180
presently	(if) 5	$(36+8)=44$	220
	7	36	252

No clue about his wife's age from above explanation

7. Directions for questions (6- 8Q) : Eight years ago there were 5 members in the Arthur's family and then the average age of the family was 36 years. Mean while Arthur got married and gave birth to a child. Still the average age of his family is same now.

Q. The age of his wife at the time of his child's birth was. If the difference between the age of her child and herself was 26 years :

- A. 25 years
- B. 26 years ☒
- C. 20 years
- D. can't be determined

- Your Answer :
- Correct Answer : B

◦ **Answer Justification :**

Explanation:

Since we know that the difference between the age of any two persons remains always constant, while the ratio of their ages gets changed as the time changes.

So, if the age of his child be x (presently)

Then the age of wife be $x + 26$ (presently)

Thus, the total age = $x + (x + 26) = 32$ [$252 - 220 = 32$]

$$x = 3$$

Therefore the age of her child is 3 years and her self is 29 years. Hence her age at the time of the birth of her child was 26 years.

Alternatively: As we have mentioned above that the age difference remains always constant. Therefore her age at the time of her child's birth was 26 years.

8. Directions for questions (6- 8Q) : Eight years ago there were 5 members in the Arthur's family and then the average age of the family was 36 years. Mean while Arthur got married and gave birth to a child. Still the average age of his family is same now.

Q. The age of Arthur at the time of his marriage was :