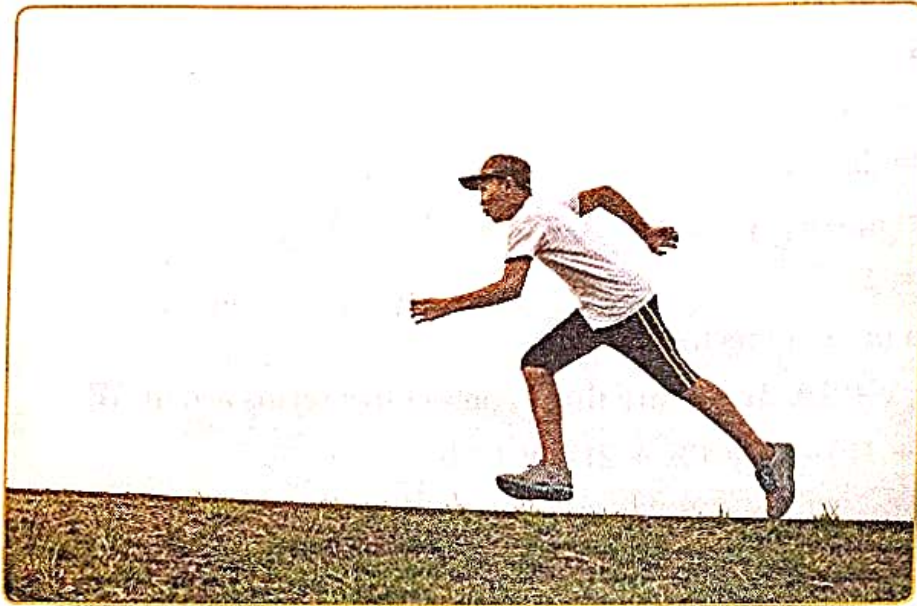


∴ Option (a) is correct.

2. Read the following and answer any four questions from (i) to (v).

Your friend Veer wants to participate in a 200 m race. He can currently run that distance in 51 seconds and with each day of practice it takes him 2 seconds less. He wants to complete it in 31 seconds.

[CBSE Question Bank]



- (i) Which of the following terms are in AP for the given situation?

(a) 51, 53, 55, ... (b) 51, 49, 47, ... (c) -51, -53, -55, ... (d) 51, 55, 59, ...

- (ii) What is the minimum number of days he needs to practice till his goal is achieved?

[Competency Based Question]

(a) 10 (b) 12 (c) 11 (d) 9

- (iii) Which of the following term is not in the AP of the above given situation?

(a) 41 (b) 30 (c) 37 (d) 39

- (iv) If n th term of an AP is given by $a_n = 2n + 3$ then common difference of the AP is

(a) 2 (b) 3 (c) 5 (d) 1

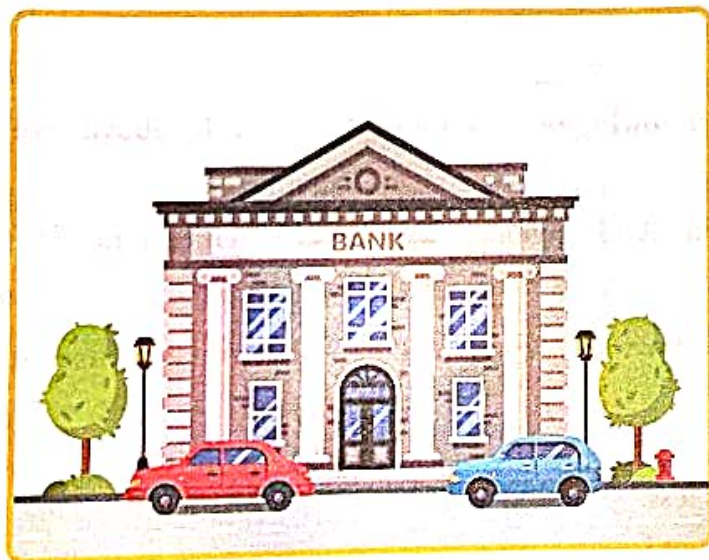
- (v) The value of x , for which $2x$, $x + 10$, $3x + 2$ are three consecutive terms of the AP is

(a) 6 (b) -6 (c) 18 (d) -18

ol. (i) Since Veer currently runs the distance in 51 seconds and with each day of practice it takes him 2 seconds less.

∴ Option (a) is correct.

3. Your elder brother wants to buy a car and plans to take loan from a bank for his car. He repays his total loan of ₹ 1,18,000 by paying every month starting with the first instalment of ₹ 1000. He increases the instalment by ₹ 100 every month.



Based on the above information, answer the following questions:

- (i) What is the amount paid by him in 30th instalment?
- (ii) What is the amount paid by him upto 30 instalments?

Case Study-based Questions

Each of the following questions are of 4 marks.

1. Read the following and answer any four questions from (i) to (v).

India is competitive manufacturing location due to the low cost of manpower and strong technical and engineering capabilities contributing to higher quality production runs. The production of TV sets in a factory increases uniformly by a fixed number every year. It produced 16000 sets in 6th year and 22600 in 9th year.

[CBSE Question Bank]



- (i) What is the production during first year?
(a) 2200 (b) 2500 (c) 5000 (d) 8000
- (ii) What is the production during 8th year?
(a) 11,000 (b) 20,400 (c) 22,000 (d) 20,000
- (iii) Total production in (during) first 3 years is
(a) 21,600 (b) 22,000 (c) 25,000 (d) 30,000
- (iv) In which year, the production is ₹29,200?
(a) 9th (b) 12th (c) 14th (d) 15th
- (v) The difference of the production during 7th year and 4th year is
(a) 1100 (b) 2200 (c) 4400 (d) 6600