

Chapter 3 Class 10 Linear Equations In Two Variables - MCQ Worksheet 2 by *teachoo*

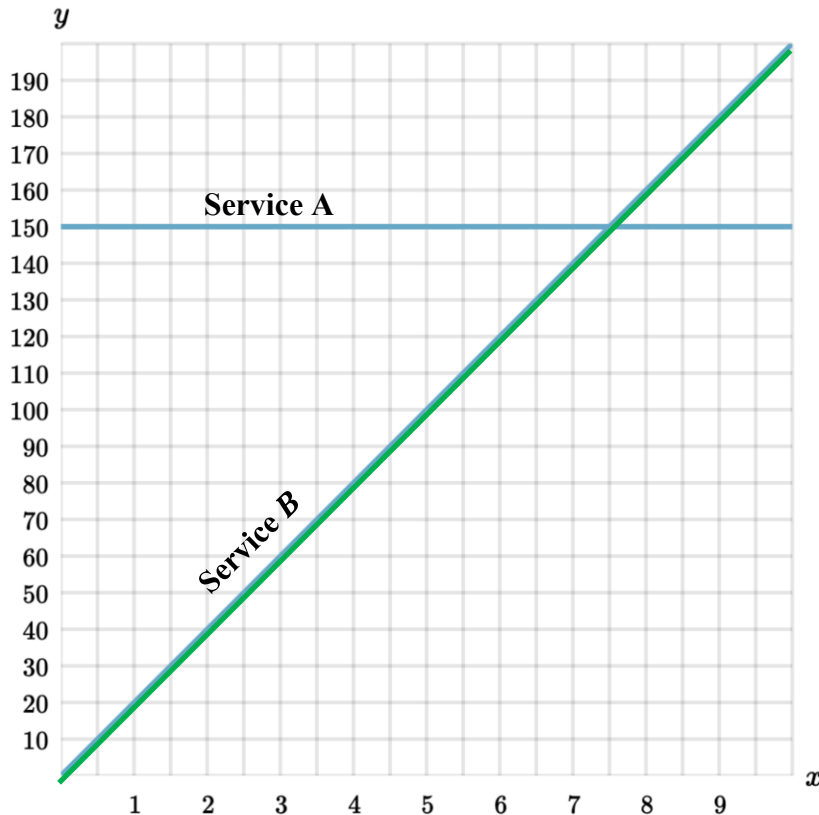
Chapter: [Chapter 3 Class 10 Maths – Linear Equations in Two Variables](#)

Name: _____

School: _____

Roll Number: _____

1. The graph shows two lines representing the monthly cost (y-axis) and number of movies (in thousands, x-axis) of two streaming services, A and B



What does this intersection point represent?

- a) The point where Service A becomes more expensive than Service B.
- b) The number of movies watched for which both services cost the same.
- c) The starting cost of Service B.
- d) The maximum cost a user will pay.

2. A recipe for a sauce requires x ml of tomato paste and y ml of water. The total volume must be 100 ml, so $x + y = 100$. The amount of water must be four times the amount of tomato paste, so $y = 4x$. Which statement is true?

- a) More tomato paste is used than water.
- b) Equal amounts of each are used.
- c) More water is used than tomato paste.

d) The information is insufficient.

3. The flight paths of two airplanes are $x + 2y = 11$ and $2x + 4y = 22$. What can be said about their flight paths?

- a) They will collide.
- b) They are flying parallel to each other.
- c) They are on the exact same flight path.
- d) They are flying away from each other.

4. The cost (C , in ₹) for two mobile data plans depends on the data used (D , in GB). Plan A is modeled by $C = 20D + 400$. Plan B is modeled by $C = 40D + 200$. A graph of these two equations shows two intersecting lines. Based on the equations, which statement is true?

- a) Plan A is always cheaper.
- b) Plan B is always cheaper.
- c) Plan B is cheaper for less than 10 GB of data, and Plan A is cheaper for more than 10 GB of data.
- d) Plan A is cheaper for less than 10 GB of data, and Plan B is cheaper for more than 10 GB of data.

5. In a parking lot, there are only cars (4 wheels) and bikes (2 wheels). The total number of vehicles is 50 . The total number of wheels is 140. Let c be the number of cars and b be the number of bikes. Which system of equations is correct?

- a) $c + b = 50$ and $2c + 4b = 140$
- b) $c + b = 140$ and $4c + 2b = 50$

c) $c + b = 50$ and $4c + 2b = 140$

d) $c = 50, b = 140$

6. The solution to a system of equations is $x = 5, y = 2$. In the context of a problem where x is the number of adult tickets and y is the number of child tickets sold, what does this solution mean?

a) 5 child tickets and 2 adult tickets were sold.

b) A total of 7 tickets were sold.

c) 5 adult tickets and 2 child tickets were sold.

d) The price of an adult ticket is 5 and a child ticket is 2 .

7. A line on a graph passes through (0,4) and (2,0). This line represents the boundary of a region. What is the equation of this line?

a) $x + y = 4$

b) $2x + y = 4$

c) $x + 2y = 4$

d) $y = 2x + 4$

8. If a system of equations models the supply and demand for a product, the point of intersection of the 'supply' line and 'demand' line is called the equilibrium point. What does this point signify?

a) The price at which the manufacturer makes maximum profit.

b) The price at which the quantity supplied equals the quantity demanded.

- c) The maximum price consumers are willing to pay.
- d) The minimum price producers are willing to accept.

9. A student has a total of 30 coins, consisting of 5-rupee and 10-rupee coins, amounting to ₹200. Let x be the number of 5-rupee coins and y be the number of 10-rupee coins. Solving the system gives $x = 20, y = 10$. What would happen if the student had one less 10 rupee coin?

- a) The total value would be ₹190.
- b) The total value would be ₹195.
- c) The total number of coins would be 29 .
- d) Both (b) and (c) are correct.

10. The equation of a river's path is $y = 2x + 1$. A bridge is planned to be built along the line $y = -0.5x + 6$. The solution to this system of equations gives the coordinates for what?

- a) The length of the bridge.
- b) The point where the bridge will cross the river.
- c) The flow speed of the river.
- d) The height of the bridge.

Important links

- Answer of this worksheet - <https://www.teachoo.com/25589/5360/MCQ---Worksheet-2/category/Teachoo-Questions---MCQs/>
- Full Chapter with Explanation, Activity, Worksheets and more – <https://www.teachoo.com/subjects/cbse-maths/class-10th/ch3-10th-pair-of-linear-equations-in-two-variables/>
- Science Class 10– <https://www.teachoo.com/subjects/science/class-10/>
- Maths Class 10- <https://www.teachoo.com/subjects/cbse-maths/class-10th/>

For more worksheets, ad-free videos and Sample Papers – subscribe to

Teachoo Black here - <https://www.teachoo.com/black/>