

8th LINEAR EQUATIONS CBSE TEST PAPER

CBSE TEST PAPER-6

The product of two positive consecutive integers is equal to 56. Find the two integers.

The sum of the squares of two consecutive numbers is equal to 145. Find the two numbers.

A rectangular garden has length of $x + 2$ and width of $x + 1$ and an area of 42. Find the perimeter of this garden

A right triangle has one leg 3 cm longer than the other leg. Its hypotenuse is 3 cm longer than its longer leg. What is the length of the hypotenuse?

The height h above the ground of an object propelled vertically is given by $h = -16t^2 + 64t + 32$, where h is in feet and t is in seconds. At what time t will the object be 80 feet above ground?

The area of a rectangle is equal to 96 square meters. Find the length and width of the rectangle if its perimeter is equal to 40 meters.

The height of a triangle is 3 feet longer than its corresponding base. The area of the triangle is equal to 54 square feet. Find the base and the height of the triangle.

The product of the first and the third of three consecutive positive numbers is equal to 1 subtracted from the square of the second of these numbers. Find the three numbers.

The product of two positive numbers is equal to 2 and their difference is equal to $7/2$. Find the two numbers.

The sum of the squares of three consecutive integers is equal to 77. What are the three integers?

Points A and B are 100 km apart on a highway. One car starts from A and another from B at the same time. If the car travel in the same direction at a constant speed, they meet in 5 hours if the car travel towards each other, they meet in 1 hour. What are the speeds of the two cars.

A boat goes 12 km upstream and 40 km downstream in 8 hours. It can go 16 km upstream and 32 km downstream in the same time. Find the speed of the boat in still water and the speed of the stream.

A boat goes 16 km upstream and 24 km downstream in 6 hours. It can go 12 km upstream and 36 km downstream in the same time. Find the speed of the boat in still water and the speed of the stream.

A person can row 8 km upstream and 24 km downstream in 4 hours. He can row 12 km downstream and 12 km upstream in 4 hours. Find the speed of the person in still water and also the speed of the current.

There are two classrooms A and B containing students. If 5 students are shifted from room A to room B, the resulting number of students in the two rooms become equal. If 5 students are shifted from room B to room A, the resulting number of students in room A becomes double the number of students left in room B. Find the original number of students in the two rooms separately.

Seven times a two-digit number is the same as four times the number obtained on interchanging the digits of the given number. If one digit of the given number exceeds the other by 3, find the number.

If twice the son's age in years is added to the age of his father the sum is 90. If twice the father's age in years is added to the age of the son, the sum is 120. Find their ages.

Ram is three times as old as Rahim. Five years later, Ram will be two-and-a-half times as old as Rahim. How old are Ram and Rahim now?

If the numerator of a fraction is multiplied by 2 and its denominator is increased by 2, it becomes $\frac{6}{7}$. If instead we multiply the denominator by 2 and increase the numerator by 2 it reduces to $\frac{1}{2}$. What is the fraction?

A fraction becomes $\frac{4}{5}$ if 1 is added to each of the numerator and the denominator. However, if we subtract 5 from each, the fraction becomes $\frac{1}{2}$ find the fraction.
