Mathematics-DPP-Class-X

(Word Problems On Quadratic Equations)

(1) The age of man is twice the square of the age of his son. Eight years hence,the age of the man will be 4 years more than three times the age of his son. Find their present ages.

(2) The total cost of a certain of a piece of wire is ₹200.If the piece was metres longer and each metre of wire costs ₹ 2 less, the cost of the piece would have remained unchanged.How long is the piece and what is its original rate per metre?

(3) The difference of squares of two numbers is 180.The square of the smaller number is 8 times the larger number.Find the two numbers.

(4) The denominator of a fraction is one more than twice the numerator. If the sum of the fraction and its reciprocal is $2\frac{16}{21}$, find the fraction.

(5) The sum of squares of two consecutive even numbers is 340.Find the numbers.

(6) The sum of squares of two consecutive multiples of 7 is 637.Find the multiples.

(7) If a man walks 1km/hr faster than his usual speed then he covers a distance of 3km in 15 minutes less time.Find his usual speed.

(8) The diagonal of a rectangular field is 16m more than the shorter side.If the longer side is 14m more than the shorter side then find the lengths of the sides of the field.

(9) The sum of a number and its reciprocal is $2\frac{1}{30}$. Find the number.

(10) If the sum of two natural numbers is 27 and their product is 182,find the numbers.