

Q18 If $P = \frac{x^2 - 2x - 15}{x^2 + 7x + 12}$ & $Q = \frac{x^2 - 4x - 77}{x^2 + 11x + 28}$ find $P \div Q$

Q19 Find all zeroes of polynomial $2x^4 + 7x^3 - 19x^2 - 14x + 30$, if two of its zeroes are $\sqrt{2}$ & $-\sqrt{2}$.

Q20 Find zeroes of given polynomial & verify relationship between zeroes & coefficient of polynomial.
$$p(x) = 6x^2 - 3 - 7x.$$

Q21 A boat travels for 7 hours. If it travels 4 hours downstream and 3 hours upstream then it covers the distance of 116 km. But if it travels 3 hours downstream and 4 hours upstream it covers a distance of 108 km. Find the speed of boat.

Q22 A number consist of 2 digits. when it is divided by sum of the digits, the quotient is 6 with no remainder. When the number is diminished by 9, the digits are reversed. Find the number.

Q23 Two women and 5 men can together finish an embroidery work in 4 days, while 3 women and 6 men can finish it in 3 days. Find the time taken by 1 woman alone & 1 man alone to finish the work.