Algebra 12: Nature of Cubic roots

Example 1

Prove that x3 – 5x2 + 17x – 13 = 0 has only one real root.

Question 1:

Prove that x3 – 8x2 + 22x – 20 = 0 has only one real root.

Question 2:

Prove that x3 – 15x2 + 67x + 53 = 0 has only one real root.