Possible Rational Zeros/Roots

Possible Rational Roots:

P: factors of the constant (±)

Q: factors of the leading coefficient (±)

$\pm\frac{p}{q}$: put each factor of p over each factor of q to get possible rational roots

If your calculator does not give you a head start, you must find the possible rational roots.

$f(x) = \overset{Q}{4}x^3 - 3x^2 + 4x - \overset{P}{3}$

P: ±1, ±3

Q: ±1, ±2, ±4

$\pm\frac{p}{q}$: $\pm 1, \pm\frac{1}{2}, \pm\frac{1}{4}, \pm 3, \pm\frac{3}{2}, \pm\frac{3}{4}$

Type the possible rational roots into the table of your calculator. If the possible rational root gives you a 0 for the y value, then that number is one of your roots.

calc

[y=] and type in function

[GRAPH] look at x-int.

[TABLE] type in P/q to see which ones give you 0 for y