1. Solve: $x^3 - 7x^2 + 7x + 15 = 0$

    a.   Find the "whole number" root by graphing.      _____

    b.   Use synthetic division to factor that root out.

    c.   Use quadratic formula to calculate the remaining two roots.

    d.   Write final, factored answer to include **ALL THREE** roots.

2.  Solve: $x^4 - 3x^3 + 6x^2 - 12x + 8 = 0$

    a.   Find the real root(s) by graphing.      _____  _____

    b.   Use synthetic division to factor one of the real roots out. (You should be left with a cubic)

    c.   Use synthetic division **AGAIN** to factor out the *other* real root from the cubic function remaining in (b). You should be left with a quadratic

    d.   Use quadratic formula to calculate the remaining two roots.

    e.   Write final answer to include **ALL THREE** roots.