

NAME QUARTER GRADE & SECTION DATE **Activity: ROOTS OF A POLYNOMIAL EQUATION****Part I.** Determine the number of roots and what are the roots of the polynomial.

1. $(x + 4)(x + 3) = 0$

How many roots are there in this equation? What are the roots?

2. $(x - 4)^3 = 0$

How many roots are there in this equation? What are the roots? of multiplicity

3. $(x - 1)^2(x - 3) = 0$

How many roots are there in this equation? What are the roots? of multiplicity , and

4. $x^5(x + 3)(x - 4) = 0$

How many roots are there in this equation? What are the roots? of multiplicity , and **Part II.** Find the other roots.

1. If one of the roots of the polynomial equation
- $x^2 + 5x - 14 = 0$
- is 2, find the other root.

2. If one of the roots of the polynomial equation
- $x^3 - 13x + 12 = 0$
- is -4, find the other roots.

 and

3. If one of the roots of the polynomial equation
- $x^4 - x^3 - 7x^2 + 13x - 6 = 0$
- is 1, find the other roots.

, and How many attempts? ____.
How well did you do?

Need help!



Just OK!



Splendid

I FEEL THAT...