## Advanced Algebra

Unit 5 Polynomial functions. Using the power rule to find the max and min of the given functions.
Unit 5: Assignment \#4
Either use long division or your calculator to find the other roots.

1) $y=x^{3}-2 x^{2}-40 x-64$ GIVEN roots is -4
Derivative Function and Solutions

## Factored Equation:

## Roots:

Accurate Sketch labeled with the Max and Min
2) $y=x^{3}-4 x^{2}-20 x+48$ GIVEN ROOT is 6

Derivative Function and solutions
Derivative Function and solutions

Roots:

Accurate Sketch labeled with the max and min
3) $y=x^{3}+6 x^{2}-1 x-30$ GIVEN ROOT is 2
4) $y=x^{3}+4 x^{2}-76 x-160$ Given ROOT is -2
5) $y=x^{3}-14 x^{2}+8 x+320$ Given root Is-4
6) $y=x^{3}+1 x^{2}-30 x-72 \quad$ Given root is 6

