**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Acc Geometry/ Adv Alg**

**Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11.1 – 11.2 Test Review**

**List the possible rational roots of the following functions**

$1) f\left(x\right)=x^{2}-5x+12$ $ 2) f\left(x\right)=2x^{2}-5x^{3}-15+10x$

**Solve for the zeros of each function using the method of your choice.**

3) $f\left(x\right)= -x^{3}-5x^{2}-4x-20$ 4) $f\left(x\right)= x^{4}-8x^{3}-38x^{2}+360x-315$

5)$f\left(x\right)= 14x^{3}-25x^{2}-8x+4$ 6) $f\left(x\right)= -3x^{5}+6x^{4}+18x^{3}$

7) $x^{3}-9x^{2}+33x-25=0$ 8) $6x^{3}-17x^{2}-27x-4=0 $

9) 10) $x^{5}+x^{4}-7x^{3}-7x^{2}-18x-18=0$



$$11) 3x^{5}+21x^{3}=54x 12) 3x^{5}-x^{4}-2x^{3}=0$$

**Write a polynomial function with the given zeros.**

$13) 2+4i, \frac{1}{3}$ $ 14) 0\left(mult of 4\right), 3\sqrt{5} , -3i $