Station 1

Factor the following polynomials:



Station 3

Factor AND solve the following polynomials.

1)

2)

Station 2

Find the product of the following polynomials. Then classify the product by degree and number of terms and classify the end behavior using proper notation.

1)

2)

Station 4

1) For the following polynomial: (a) state the zeros, (b) determine any multiplicities, (c) sketch a graph of the polynomial.

2) For the following polynomial: (a) state the zeros, (b) determine any multiplicities, (c) sketch a graph of the polynomial.

3) Sketch the graph of a polynomial that satisfies the following constraints:

* Negative odd
* Zero at (-3, 0) with multiplicity of 2
* Zero at (0, 0) with multiplicity of 3
* Zero at (5, 0) with multiplicity of 2

Station 5

Factor and solve the following polynomials:



Station 6

1) Decide whether is a factor of . Explain your reasoning using complete sentences.

2) Determine the quotient of the following polynomials. Then determine if the divisor is a factor of the dividend and explain your reasoning.

Station 7

Factor and solve the following polynomials:

1)

2)

Station 8

State the following equations or patterns. Try to do so *without* looking at your notes.

1) Quadratic Formula

2) Definition of *i*

3) Sum of Cubes

4) Difference of Cubes

5) Give an example of a polynomial that you could factor using the sum of cubes and factor it.

6) Give an example of a polynomial that you could factor using the difference of cubes and factor it.