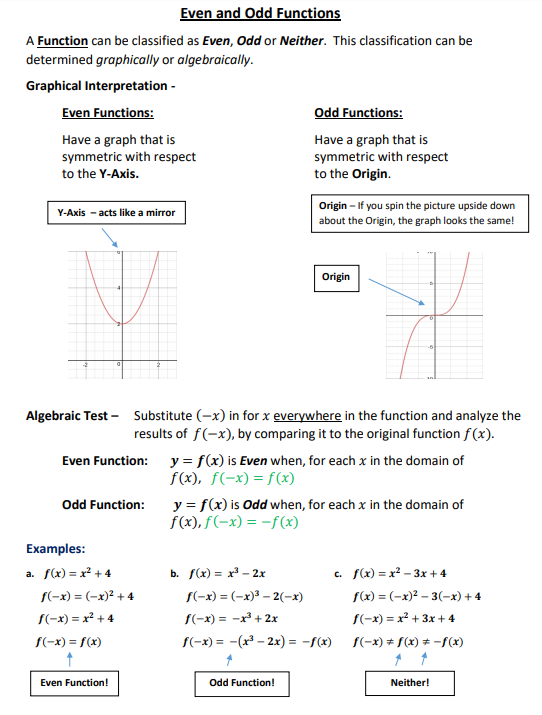
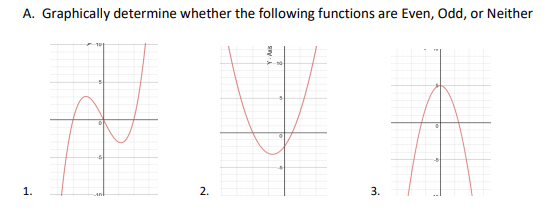
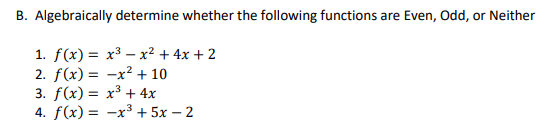
Practice for Units 6 & 7 Name \_\_\_\_\_\_\_\_\_\_\_\_\_

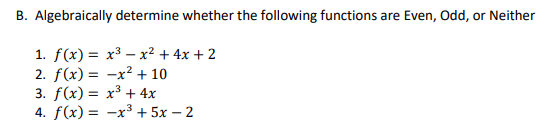
Station 1 – Even and Odd Functions

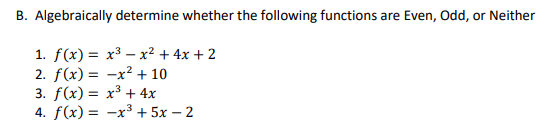
Read and answer the questions on the back.

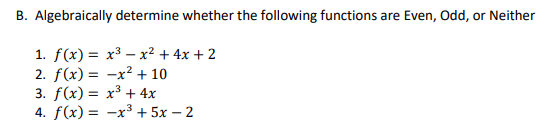








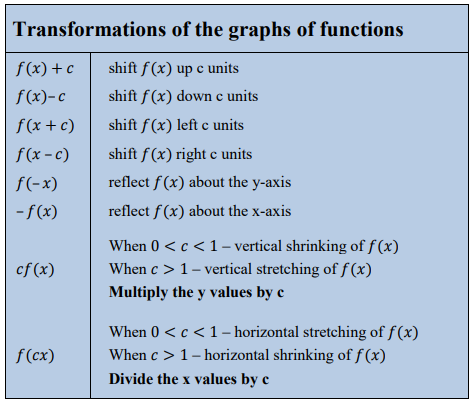




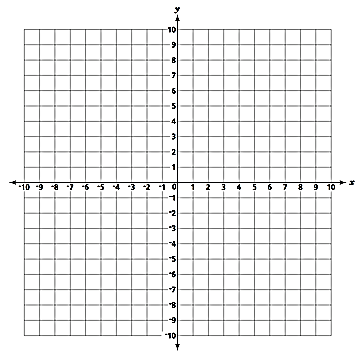
C. If is an odd, one-to-one function with then which point *must* lie on the graph

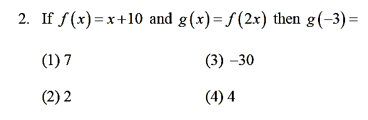
of its inverse **?**

1. (2)(3) (4)

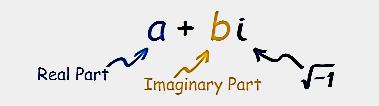
Station 2 – Transformations

1. Given the graph of, sketch and the label the graph of the following functions using a different color for each.





1. Suppose the point is a point of the graph of . For each of the following, state the coordinate of the point after the transformation.
2. \_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_
7. \_\_\_\_\_\_\_\_\_

Station 3 – Solving Equations

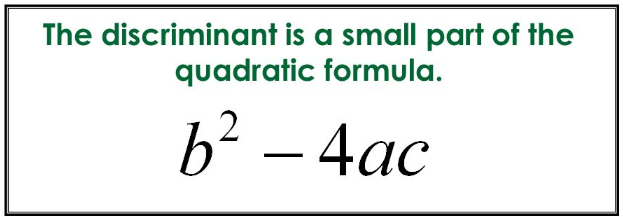
1. Solve the equation. Leave answers in simplest a + bi form.
2. Solve the equation. Check for extraneous solutions.
3. Solve the equation.

Station 4 – Radicals and Powers of i

1. What is the product of and ?
2. Given is the imaginary unit, in simplest form is
3. The expression is equivalent to
4. What is the sum of and the conjugate of ?
5. Simplify
6. c)

1. **State the domain of**
2. Simplify. Rationalize the denominator.
3. **Simplify completely.**

|  |  |
| --- | --- |
|  |  |
|  |  |

Station 5 – Discriminant

Find the discriminant to determine the number of x-intercepts and the nature of the roots.



Challenge:

1. Find all the values of such that has unequal, imaginary roots.

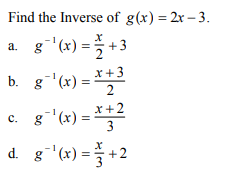
Station 6 – Review

1. Which of the following represents the trinomial written as a product?

1) 3)

2) 4)

1. Which number line below represents the solution set of the inequality?
2. 3)
3. 4)



2. For the piecewise function, which of the following represents?
3. 2) 3) 4)

