Unit 1 Review sheet Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_Block:\_\_

Factor the following completely:

A) B) C)

D) E)

F) G)

SOLVE BY FACTORING

Solve by factoring.

A) B)

C)

IMAGINARY & COMPLEX NUMBERS

Simplify.

A.  B. 

C. D.  E. 

F.  G.  H. 

D. What is the complex conjugate of ?

SOLVE BY COMPLETING THE SQUARE

Solve by completing the square.

A) B)

C)

DISCRIMINANT

Find the discriminant of the quadratic equation and complete the table. Do NOT solve the equation.

|  |  |  |
| --- | --- | --- |
| Equation | Discriminant | Describe the solutions including how many, real, rational, irrational, or imaginary |
| x2 + 2x + 8 = 0 |  |  |
| x2 + 6x + 1 = 0 |  |  |
| 4x2 + 2x – 6 = 0 |  |  |
| 2x2 – 2x + 5 = 0 |  |  |

QUADRACTIC FORMULA

Solve using the Quadratic Formula.

A) B)

C)