CCSS Advanced Algebra 4 AA6: Complex Numbers Assessment A Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**C Level Questions**

1. Use the Quadratic Formula or , to find the solutions to each equation:

a. b.

2. Use the Quadratic Formula to find the complex roots of the function .

3. Simplify each rational expression fully.

a. b.

4. Fully factor the polynomial and sketch a graph.

**A/B Level Questions**

5. The equation has complex roots . What is the value of ? Show your work and/or explain your answer fully.

6. Given that show that

7. The polynomial has 2 real roots (). Use polynomial division and the quadratic formula to find the 2 complex roots.

CCSS Advanced Algebra 4 AA6: Complex Numbers Assessment B Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**C Level Questions**

1. Use the Quadratic Formula or , to find the solutions to each equation:

a. b.

2. Use the Quadratic Formula to find the complex roots of the function .

3. Simplify each rational expression fully.

a. b.

4. Fully factor the polynomial and sketch a graph.

**A/B Level Questions**

5. The equation has complex roots . What is the value of ? Show your work and/or explain your answer fully.

6. Given that show that

7. The polynomial has 2 real roots (). Use polynomial division and the quadratic formula to find the 2 complex roots.

CCSS Advanced Algebra 4 AA6: Complex Numbers Assessment C Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Use the Quadratic Formula or , to find the solutions to each equation:

a. b.

2. Use the Quadratic Formula to find the complex roots of the function .

3. Simplify each rational expression fully.

a. b.

4. Fully factor the polynomial and sketch a graph.

**A/B Level Questions**

4. The equation has complex roots . What is the value of ? Show your work and/or explain your answer fully.

5. Given that show that

7. The polynomial has 2 real roots (). Use polynomial division and the quadratic formula to find the 2 complex roots.

CCSS Advanced Algebra 4 AA6: Complex Numbers Assessment D Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**C Level Questions**

1. Use the Quadratic Formula or , to find the solutions to each equation:

a. b.

2. Use the Quadratic Formula to find the complex roots of the function .

3. Simplify each rational expression fully.

a. b.

4. Fully factor the polynomial and sketch a graph.

**A/B Level Questions**

4. The equation has complex roots . What is the value of ? Show your work and/or explain your answer fully.

5. Given that show that

7. The polynomial has 2 real roots (). Use polynomial division and the quadratic formula to find the 2 complex roots.