**Question 1** Standard: A1.APR.A.1 Blooms: Apply DOK: 1 Total Points: 5

Points Scored:

Points Possible: 49

 ---------- = %

Perform the following operation on the polynomials as instructed below:

(4x3 – 3x2 + 5x – 7) – (–2x3 + 5x2 – 2)

|  |
| --- |
| Show ALL work necessary (4 points): **Answer** (1 point):  |

**Question 2** Standard: A1.APR.A.1 Blooms: Apply DOK: 1 Total Points: 5

Perform the following operation on the polynomials as instructed below:

(5x3 + 2x2 + 3x – 9) + (–4x3 – 3x2 + 5)

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| --- |
| Show ALL work necessary (4 points): **Answer** (1 point): |

**Question 3** Standard: A1.SSE.A.2 Blooms: Apply DOK: 1 Total Points: 5

Perform the following operation on the polynomials as instructed below:

(2x3 + 3x2 + 4x – 5)(–4x2 – 2x + 7)

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| --- |
| Show ALL work necessary (4 points):**Answer** (1 point): |

**Question 4** Standard: A1.APR.A.1 Blooms: Analyze DOK: 2 Total Points: 3

Perform the necessary operations to convert the form of the expression below to an equivalent expression from the list shown below… select the appropriate choice by circling:

(a2y)1/2 (b6c4)1/3

1. ab2c c) ab2c √y 3√c
2. ab3c √cy d) ab3c2

|  |
| --- |
| Show ALL work necessary (2 points): **Answer** (1 point): |

**Question 5** Standard: A1.APR.A.2 Blooms: Apply DOK: 1 Total Points: 5

Perform the following operation on the polynomials as instructed below:

(x3 + x2 – 19x + 21) ÷ (x – 3)

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| --- |
| Show ALL work necessary (4 points): **Answer** (1 point): |

**Question 6** Standard: A1.APR.A.2 Blooms: Apply DOK: 2 Total Points: 5

Perform the necessary operation to simplify the rational expression shown below:

(x2 + 2x – 63)

 (x – 7)

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| --- |
| Show ALL work necessary (4 points): **Answer** (1 point):  |

**Question 7** Standard: A1.CED.A.4 Blooms: Analyze DOK: 2 Total Points: 5

Ohm’s Law is the equation V = ( I )(R), where v = voltage, I = current (Amps), and R = resistance… solve this equation for “current” in the space provided below:

|  |
| --- |
| Show ALL work necessary (2 points): **Answer** (1 point):  |

**Question 8** Standard: A1.REI.B.4 Blooms: Analyze DOK: 2 Total Points: 8

Graph and label the following functions on the SAME axis coordinate below:

y = 2x + 1

y = –x2 + 4x + 1

|  |
| --- |
| Show ALL work necessary (2 points):  |

**Question 9** Standard: A1.CED.A.4 Blooms: Analyze DOK: 2 Total Points: 4

Solve the following system of equations algebraically to find the solution points below:

y = 2x + 1

y = –x2 + 4x + 1

|  |
| --- |
| Show ALL work necessary (2 points):  **Answer** (2 points): ( , ) and ( , )  |

**Question 10** Standard: 8.EEI.C.2 Blooms: Analyze DOK: 2 Total Points: 4

Solve the following system of equations by your choice of methods to find the solution points below:

y = ⅓ x + 3

x – 3y = – 9

|  |
| --- |
| Show ALL work necessary (2 points):  **Answer** (1 points):  |