## Programming Assignment 1 (Polynomials)

#### **Test Cases**

# Test cases for method evaluate: Case 1 (3 pts) poly1 ----4 6 5 3 -11 1 5 0 evaluated at x=0 Case 2 (4 pts) poly1 1 6 2 5 3 4 4 3 5 2 6 1 evaluated at x=8 Case 3 (3 pts) poly1 1 3 -7 2 9 0 evaluated at x=-1

#### Test cases for method add

#### Case 1 (6 pts)

| poly1 | poly2 |
|-------|-------|
|       |       |
| 1 6   | -1 6  |
| 2 5   | -2 5  |

| 3 | 4 | -3 | 4 |
|---|---|----|---|
| 4 | 3 | -4 | 3 |
| 5 | 2 | -5 | 2 |
| 6 | 1 | -6 | 1 |
| 7 | 0 | -7 | 0 |
|   |   |    |   |

#### Case 2 (7 pts)

| poly1 | poly2 |  |
|-------|-------|--|
|       |       |  |
| 4 6   | 24 8  |  |
| 5 3   | 15 5  |  |
| -11 1 | 110 4 |  |
| 5 0   | 5 1   |  |

#### Case 3 (7 pts)

| poly1 | poly2   |
|-------|---------|
|       |         |
| 1 6   | 3 48976 |
| 2 5   | 2 1090  |
| 3 4   | -1 6    |
|       | -2 5    |
|       | -3 4    |

#### Case 4 (2 pts)

| poly1                    | poly2                    |
|--------------------------|--------------------------|
|                          |                          |
| zero poly/<br>empty file | zero poly/<br>empty file |

#### Case 5 (3 pts)

| po | oly1 | poly2      |
|----|------|------------|
|    |      |            |
|    |      |            |
| 1  | 6    | zero poly/ |
| 2  | 5    | empty file |
| 3  | 4    |            |
| 4  | 3    |            |
| 5  | 2    |            |
| 6  | 1    |            |
| 7  | 0    |            |

## Test cases for method multiply

#### Case 1 (7 pts)

| р | oly1 | poly2 |
|---|------|-------|
| - |      |       |
| 1 | 6    | -1 6  |
| 2 | 5    | -2 5  |
| 3 | 4    | -3 4  |
| 4 | 3    | -4 3  |
| 5 | 2    | -5 2  |
| 6 | 1    | -6 1  |
| 7 | 0    | -7 0  |
|   |      |       |

#### Case 2 (7 pts)

| poly1 | poly2 |  |
|-------|-------|--|
|       |       |  |
| 4 6   | 24 8  |  |
| 5 3   | 15 5  |  |
| -11 1 | 110 4 |  |
| 5 0   | 5 1   |  |

### Case 3 (7 pts)

| poly1 | poly2   |
|-------|---------|
|       |         |
| 1 6   | 2 40076 |
| 1 6   | 3 48976 |
| 2 5   | 2 1090  |
| 3 4   | -1 6    |
|       | -2 5    |
|       | -3 4    |

#### Case 4 (2 pts)

| poly1 | poly2 |
|-------|-------|
|       |       |
|       |       |
| _     |       |

zero poly/
empty file zero poly/
empty file

### Case 5 (2 pts)

7 0

| poly1 | poly2      |
|-------|------------|
|       |            |
| 1 6   | zero poly/ |
| 2 5   | empty file |
| 3 4   |            |
| 4 3   |            |
| 5 2   |            |
| 6 1   |            |