Comparing Linear Patterns

**Algebra
Unit 1 Line Master 1a**

1. a) Each pattern is shown as an expression and in another form.
Complete the table of values for pattern B.
Add graphs of patterns B and C to the graph of pattern A.

B: 2*x* + 4

|  |  |
| --- | --- |
| **Term number, *x*** | **Term value, *y***  |
| 0 |   |
| 1 |   |
| 2 |   |
| 3 |  |



C: –*x* + 4

|  |  |
| --- | --- |
| ***x*** | ***–x* + 4** |
| 0 | 4 |
| 1 | 3 |
| 2 | 2 |
| 3 | 1 |

 Comparing Linear Patterns (cont’d)

**Algebra
Unit 1 Line Master 1b**

b) How do the expressions compare?

 How do the graphs compare?

2. a) Each expression represents a pattern.

 For each pattern, complete the table.

 A: –2*x* B: –2*x* + 2

|  |  |
| --- | --- |
| ***x*** | ***–*2*x*** |
| 0 |   |
| 1 |   |
| 2 |   |
| 3 |  |

|  |  |
| --- | --- |
| ***x*** | **–2*x* + 2** |
| 0 |   |
| 1 |   |
| 2 |   |
| 3 |  |

 C: –2*x* + 4

|  |  |
| --- | --- |
| ***x*** | **–2*x* + 4** |
| 0 |   |
| 1 |   |
| 2 |   |
| 3 |  |

 Comparing Linear Patterns (cont’d)

**Algebra
Unit 1 Line Master 1c**

b) Graph each pattern on the grid provided on the next page. You can join each set of points with a line.



c) How do the expressions compare?
How do the lines on the graph compare?