**Investigating Equivalency**

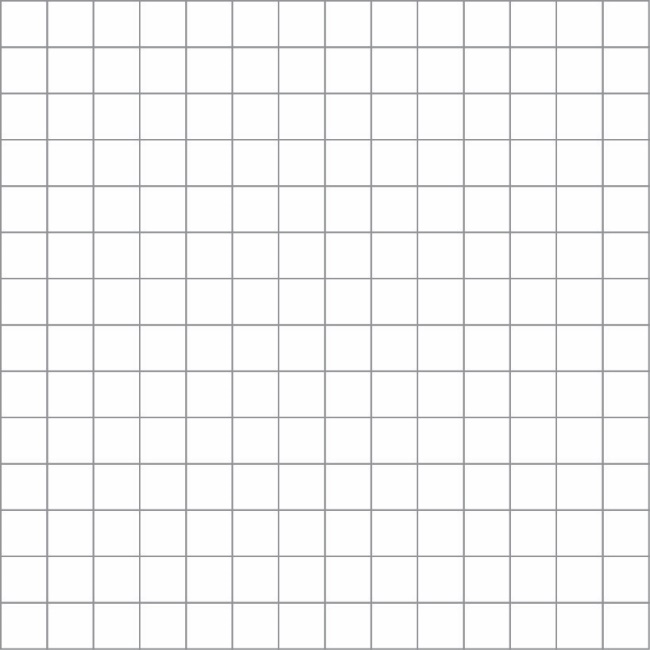
**Patterns and Relations**

**Unit 1 Line Master 2a**

1. a)Are the polynomials 2*x* − 3 and −3 + 2*x* equivalent?

Use the tables of values to show your thinking.

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



b) Graph both expressions on the same grid. Use a different colour for each expression   
or use graphing technology.   
What do you notice?   
Are the expressions equivalent?

c) Model 2*x* − 3 and −3 + 2*x* using algebra tiles. Are the expressions equivalent?

**Investigating Equivalency** (cont’d)

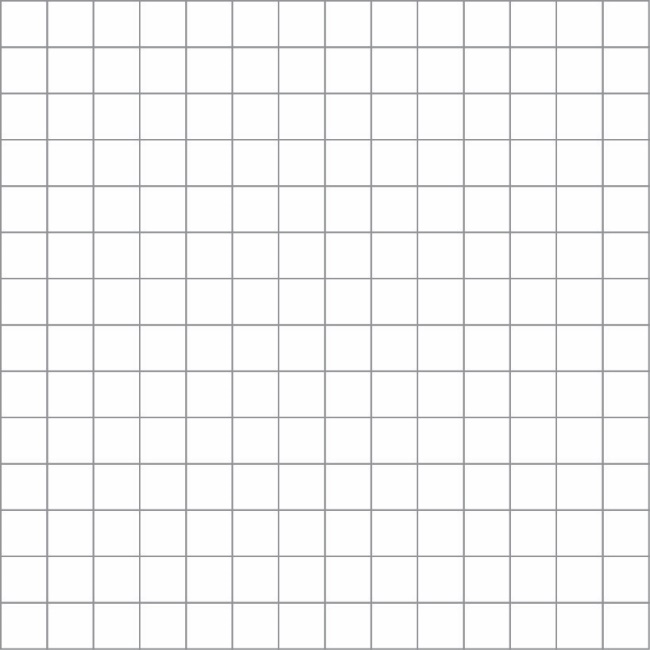
**Patterns and Relations**

**Unit 1 Line Master 2b**

1. a) Are the polynomials *x*2 − 2*x* + 3and − 2*x* + *x*2 + 3equivalent?

Use the tables of values to show your thinking.

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

b) Graph both expressions on the same grid. Use a different colour for each expression   
or use graphing technology.   
What do you notice?   
Are the expressions equivalent?

c) Model *x*2 − 2*x* + 3and − 2*x* + *x*2 + 3using algebra tiles. Are the expressions equivalent?

**Investigating Equivalency** (cont’d)

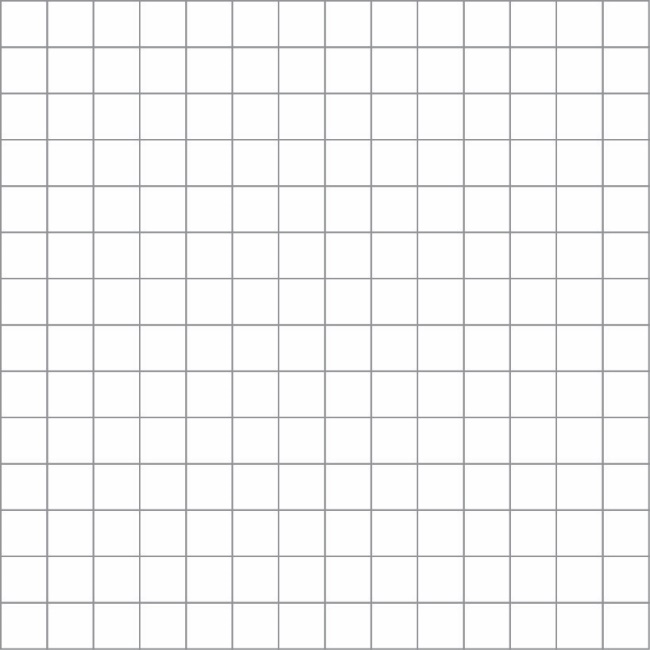
**Patterns and Relations**

**Unit 1 Line Master 2c**

1. a) Are the polynomials *x*2 and 2*x* equivalent?

Use the tables of values to show your thinking.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***x*** | ***x*2** |  | ***x*** | **2*x*** |
| −2 |  |  | −2 |  |
| −1 |  |  | −1 |  |
| 0 |  |  | 0 |  |
| 1 |  |  | 1 |  |
| 2 |  |  | 2 |  |



b) Graph both expressions on the same grid. Use a different colour for each expression   
or use graphing technology.   
What do you notice?   
Are the expressions equivalent?

c) Model *x*2 and 2*x* using algebra tiles. Are the expressions equivalent?

d) How are these polynomials alike? How are they different?