

**Patterns and Relations**  
**Unit 1 Line Master 2a**

## Investigating Equivalency

1. a) Are the polynomials  $2x - 3$  and  $-3 + 2x$  equivalent?

Use the tables of values to show your thinking.

$x$	$2x - 3$
-1	
0	
1	
2	
3	

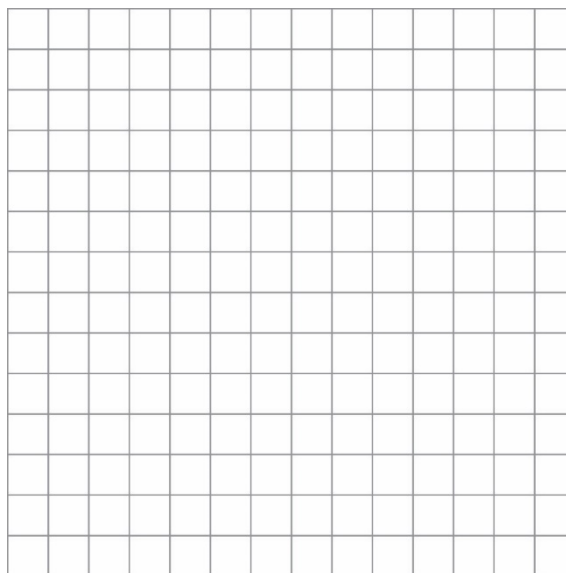
$x$	$-3 + 2x$
-1	
0	
1	
2	
3	

- 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  $2x - 3$  and  $-3 + 2x$  using algebra tiles. Are the expressions equivalent?

**Patterns and Relations**  
**Unit 1 Line Master 2b**

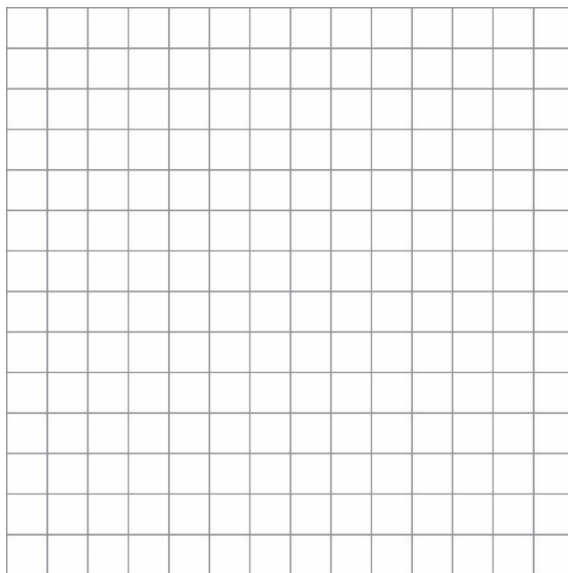
## Investigating Equivalency (cont'd)

2. a) Are the polynomials  $x^2 - 2x + 3$  and  $-2x + x^2 + 3$  equivalent?  
Use the tables of values to show your thinking.

$x$	$x^2 - 2x + 3$
-1	
0	
1	
2	
3	

$x$	$-2x + x^2 + 3$
-1	
0	
1	
2	
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  $x^2 - 2x + 3$  and  $-2x + x^2 + 3$  using algebra tiles. Are the expressions equivalent?

**Patterns and Relations**  
**Unit 1 Line Master 2c**

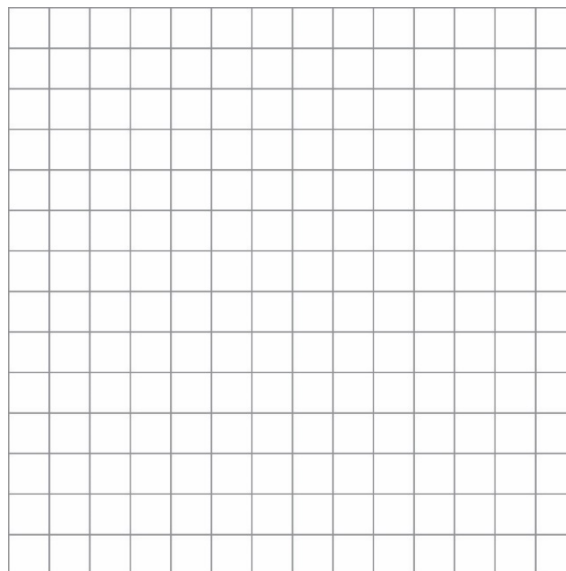
**Investigating Equivalency (cont'd)**

3. a) Are the polynomials  $x^2$  and  $2x$  equivalent?  
Use the tables of values to show your thinking.

$x$	$x^2$
-2	
-1	
0	
1	
2	

$x$	$2x$
-2	
-1	
0	
1	
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  $2x$  using algebra tiles. Are the expressions equivalent?

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