

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	

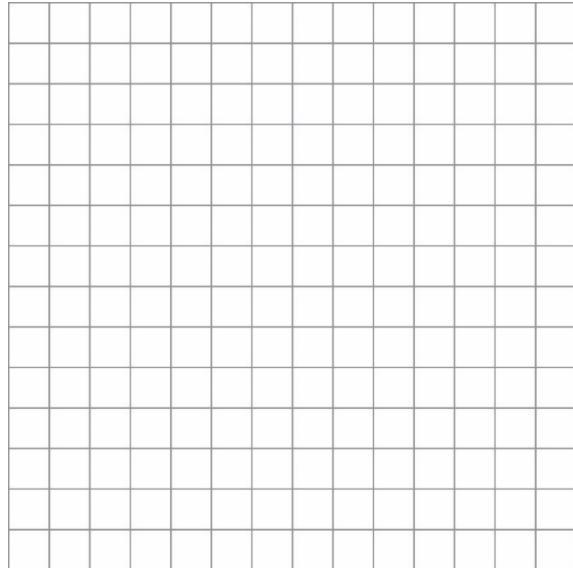
x	$-3 + 2x$
-1	
0	
1	
2	
3	

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?

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	

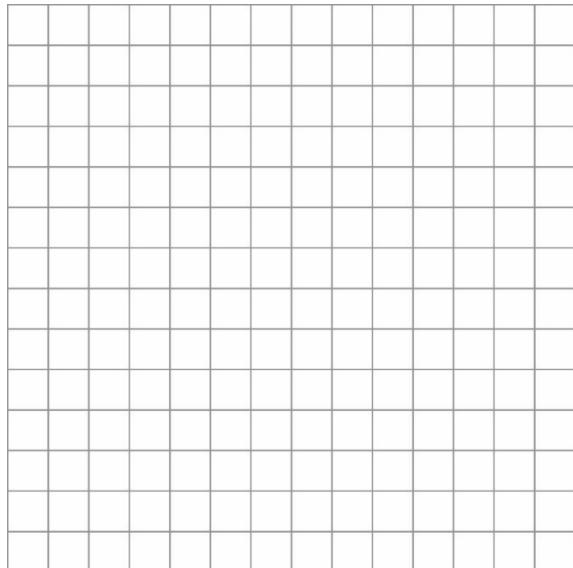
x	$-2x + x^2 + 3$
-1	
0	
1	
2	
3	

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?

Name _____ Date _____

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	

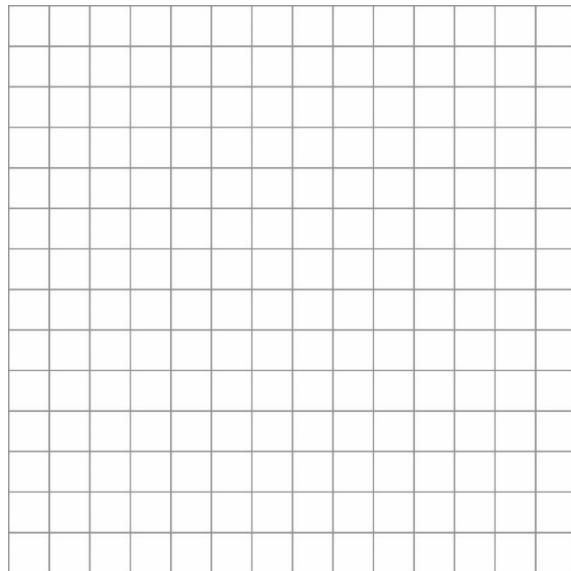
x	$2x$
-2	
-1	
0	
1	
2	

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?