

Name

2-5A

Lesson Master

Questions on SPUR Objectives  
See pages 125–127 for objectives.

REPRESENTATIONS

Objective I

In 1 and 2, consider the expressions  $2x^2 + 1$  and  $(2x)^2 - 1$ .

1. Fill in the table. Then give two values of  $x$  for which  $2x^2 + 1 = (2x)^2 - 1$ .

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$x$	$2x^2 + 1$	$(2x)^2 - 1$
-2		
-1		
0		
1		
2		

2. Give a counterexample which shows that  $2x^2 + 1$  is not equivalent to  $(2x)^2 - 1$ . \_\_\_\_\_

In 3 and 4, consider the expressions  $2(4n - 7) - (5n - 7)$  and  $3(n + 2) - 13$ .

3. Fill in the table. Do the expressions appear to be equivalent from the table?

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$x$	$2(4n - 7) - (5n - 7)$	$3(n + 2) - 13$
-2		
-1		
0		
1		
2		

4. Simplify each expression to show whether or not they are equivalent.
- \_\_\_\_\_
- \_\_\_\_\_

In 5 and 6, consider the expressions  $2x^2 + 5(x + 1)$  and  $2(x^2 + x - 1) + 3(x + 1)$ .

5. Fill in the table. Do the expressions appear to be equivalent from the table?

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$x$	$2x^2 + 5(x + 1)$	$2(x^2 + x - 1) + 3(x + 1)$
-2		
-1		
0		
1		
2		

6. Simplify each expression to show whether or not they are equivalent.
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- \_\_\_\_\_