

4-2 Patterns and Linear Functions

Use the table at the right to answer questions 1-4:

1. Is the relationship linear? Explain how you know.

Yes. Every time x goes up by 1, y goes up by 2.

	x	y	
+1	0	-3	+2
+1	1	-1	+2
+1	2	1	+2
+1	3	3	+2
+1	4	5	+2

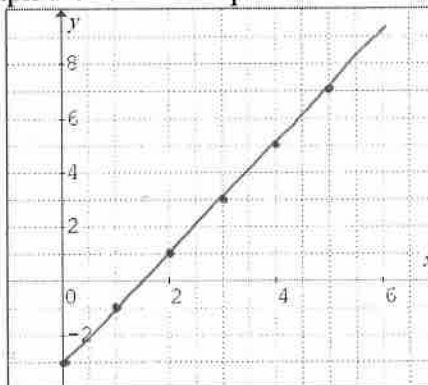
2. Express the relationship using words.

Double the x number and subtract 3 to get y .

3. Express the relationship using an equation.

$$y = 2x - 3$$

4. Graph the relationship



5. Determine whether the set of order pairs shown represents a linear relationship. Explain how you know. $\{(0, -3), (1, 2), (2, 7), (4, 17), (6, 27)\}$

Yes. Every time x increases by 1, y increases by 5. (So when x increases by 2, y increases by 10.)