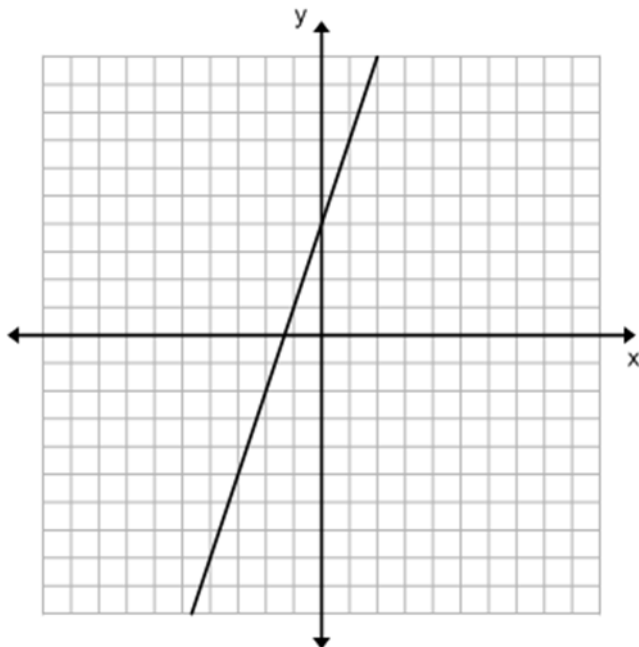


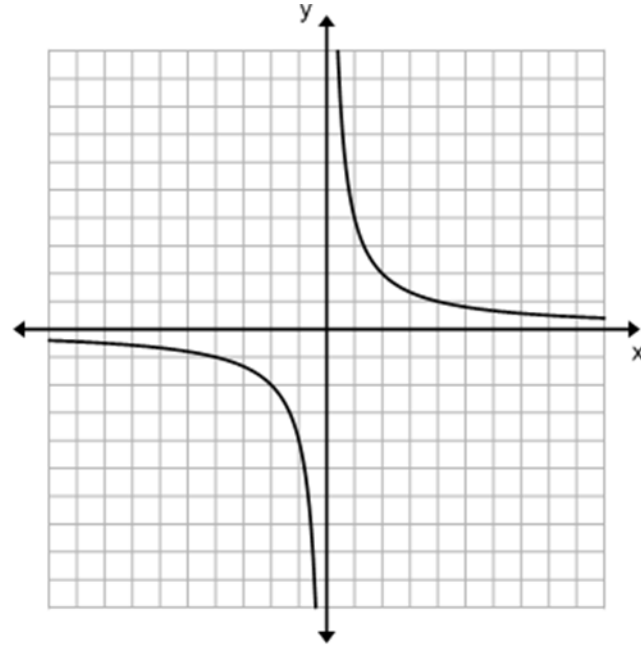
Are the following graphs linear?

1.



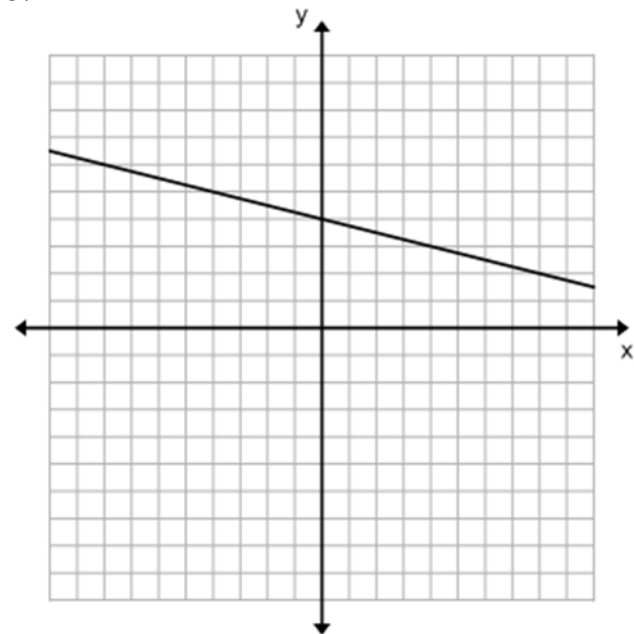
- A) Yes
- B) No

2.



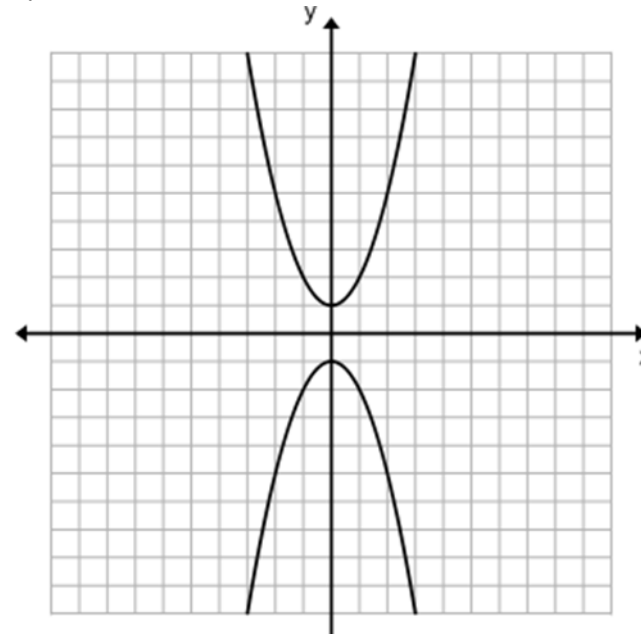
- A) Yes
- B) No

3.



- A) Yes
- B) No

4.



- A) Yes
- B) No

Algebra

A095-Patterns and Linear Functions



For each set of ordered pairs, write the rule that represents the function.

5. (0, 3),(1, 8),(2, 13),(3, 18),(4, 23) A) $y = 3x + 3$ C) $y = 2x + 3$ B) $y = 2x^2 + 6$ D) $y = 5x + 3$	6. (0, -5),(1, -8),(2, -11),(3, -14),(4, -17) A) $y = 2x - 5$ C) $y = x - 5$ B) $y = -3x - 5$ D) $y = -10x + 5$																								
7. (0, 7),(1, 5),(2, 3),(3, 1),(4, -1) A) $y = -2x + 7$ C) $y = x + 3$ B) $y = 2x + 7$ D) $y = 4x + 1$	8. (0, -7),(1, -6),(2, -5),(3, -4),(4, -3) A) $y = x - 7$ C) $y = -x + 7$ B) $y = 3x - 1$ D) $y = -3x + 4$																								
9. <table border="1"><tr><td>x</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>y</td><td>3</td><td>6</td><td>9</td><td>12</td><td>15</td></tr></table> When $x \geq 1$ A) Multiply y by 2 B) Multiply y by 3 and subtract 3 C) Divide y by 1/3 D) Add 3 to y	x	1	2	3	4	5	y	3	6	9	12	15	10. <table border="1"><tr><td>x</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>y</td><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td></tr></table> When $x \geq 1$ A) Add 5 to y B) Multiply y by 2 C) Add 7 to y, subtract 2 D) Divide y by 1/2	x	1	2	3	4	5	y	5	10	15	20	25
x	1	2	3	4	5																				
y	3	6	9	12	15																				
x	1	2	3	4	5																				
y	5	10	15	20	25																				