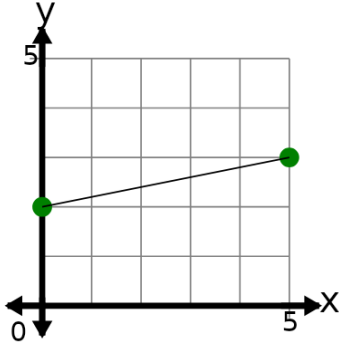




Distinguish linear and non-linear relationships

1

What slope does the line on this graph have?



A

$$m = -\frac{5}{2}$$

B

$$m = 5$$

C

$$m = \frac{1}{5}$$

D

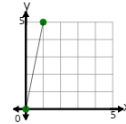
$$m = -\frac{1}{5}$$

2

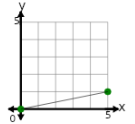
What graphed line shows this line equation?

$$y = \frac{1}{5}x$$

A



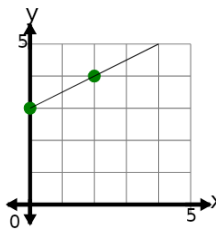
B

**3**

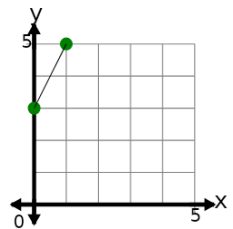
What graphed line shows this line equation?

$$y = 2x + 3$$

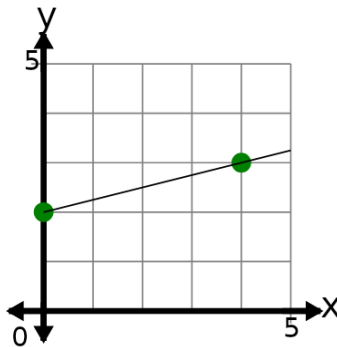
A



B

**4**

What chart of X, Y values matches this graph?



A

X	Y
0	2
1	2.25
2	2.5
3	2.75
4	3

B

X	Y
0	2
1	6
2	10
3	14
4	18



Distinguish linear and non-linear relationships

5 $m = -0.5$

A

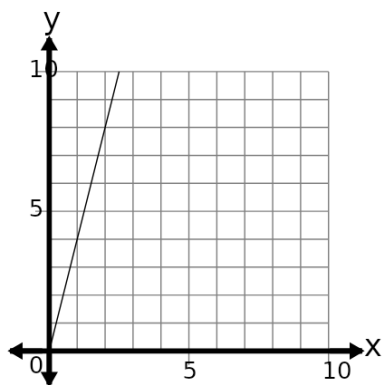
X	Y
0	0.5
1	1
2	1.5
3	2
4	2.5

B

X	Y
0	0.5
1	0
2	-0.5
3	-1
4	-1.5

6

Select the equation that would result in the line on the graph as shown



A

$$y = 2x$$

B

$$y = 4x$$

C

$$y = 0$$

D

$$y = 7x$$

E

$$y = 5x + 3$$

7

What chart of X, Y values matches this equation?

$$y = -2x + 3$$

A

X	Y
0	3
1	1
2	-1
3	-3
4	-5

B

X	Y
0	3
1	2
2	1
3	0
4	-1

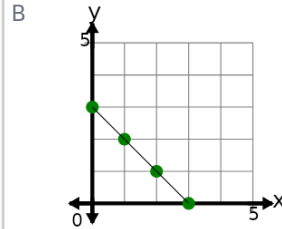
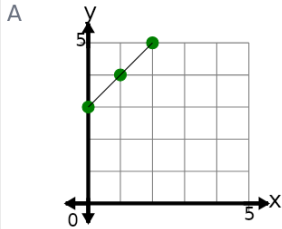


Distinguish linear and non-linear relationships

8

What graphed line shows this equation?

$$y = 1x + 3$$

**10**

Is the function linear, quadratic, or neither?

x	y	1st Diff	2nd Diff
3	-1		
4	5	6	0
5	11	6	0
6	17	6	0
7	23	6	

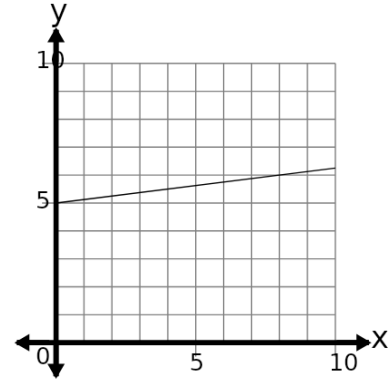
A Linear

B Neither

C Quadratic

9

Select the equation that would result in the line on the graph as shown



A $y = 1.63x + 6.5$

B $y = 2.13x + 6.5$

C $y = 0.13x + 5$

D $y = -1.87x + 3.5$

E $y = -5x - 0.13$

11

Complete the first and second differences. Is the function linear, quadratic, or neither?

x	y	1st Diff	2nd Diff
1	-2		
2	4		
3	10		
4	16		
5	22		

A Quadratic

B Linear

C Neither