



Represent relationships using equations

1

z is the result of adding r to x

A $r \times z = x$

B $x + z = r$

C $r - x = z$

D $r + x = z$

E $x - r = z$

F $r + z = x$

2

How many tennis balls are there?

tennis balls : ?

soccer balls : 16

(tennis : soccer) = (5 : 4)

A 20

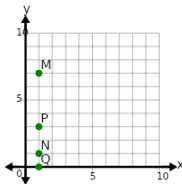
B 6

C 18

D 16

3

For the equation $y = 3x$, what point is at $x = 1$?



A P

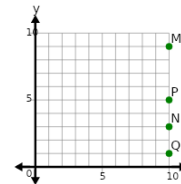
B N

C Q

D M

4

For the equation $y = -0.4x + 7$, what point is at $x = 10$?



A P

B M

C N

D Q

5

$m=3$

A	X	Y
	0	1
	1	1.33
	2	1.67
	3	2
	4	2.33

B	X	Y
	0	1
	1	4
	2	7
	3	10
	4	13



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6

What chart of X, Y values matches this line equation?

$$y = -\frac{1}{5}x + 1.2$$

A

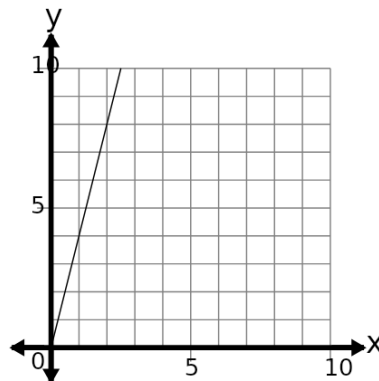
X	Y
0	1.2
1	-3.8
2	-8.8
3	-13.8
4	-18.8

B

X	Y
0	1.2
1	1
2	0.8
3	0.6
4	0.4

7

Select the equation that would result in the line shown with a slope of 4



A

$$y = 0$$

B

$$y = 4x$$

C

$$y = 3$$

D

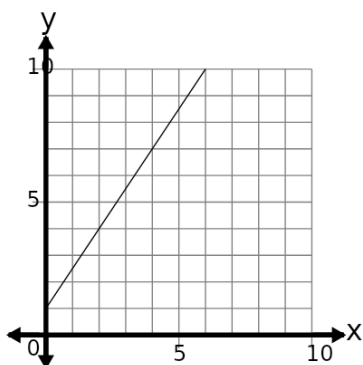
$$y = 5x$$

E

$$y = 7x - 3$$

8

Select the equation that would result in the line shown with a y-intercept of 1 and a slope of 1.5



A

$$y = 3.5x + 2.5$$

B

$$y = -1x - 1.5$$

C

$$y = 2.5x + 2.5$$

D

$$y = 1.5x + 1$$

E

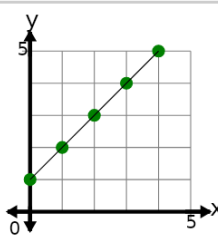
$$y = 2.5x - 0.5$$

9

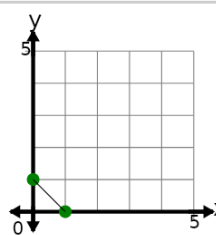
What graphed line shows this equation?

$$y = -1x + 1$$

A



B

**10**

What line equation would create this set of X, Y values?

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

A

$$y = -1x$$

B

$$y = \frac{1}{2}x$$

C

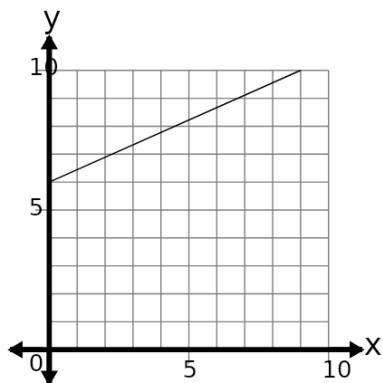
$$y = 1x$$



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11

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



A $y = 0.94x + 6$

B $y = -2.06x + 7.5$

C $y = 1.94x + 4.5$

D $y = 0.44x + 6$

E $y = -0.06x + 7.5$

12

What equation would create this chart of X, Y values?

X	Y
0	2
1	3
2	4
3	5
4	6

A

$$y = -1x + 2$$

B

$$y = \frac{1}{2}x + 2$$

C

$$y = 1x + 2$$

13

The length is four more than nine times the width.

A $l = 9(w + 4)$

B $l = 9w + 4$

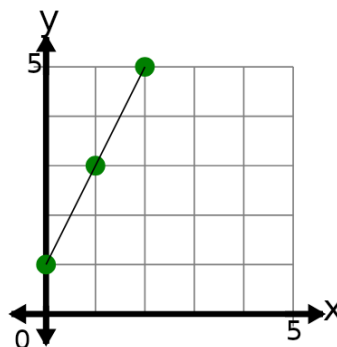
C $l = 9w - 4$

D $l = 4w + 9$

E $l = 9w \times 4$

14

What equation would create this graph?



A

$$y = \frac{2}{2}x + 1$$

B

$$y = -2x + 1$$

C

$$y = \frac{1}{2}x + 1$$

D

$$y = 2x + 1$$