

Name \_\_\_\_\_

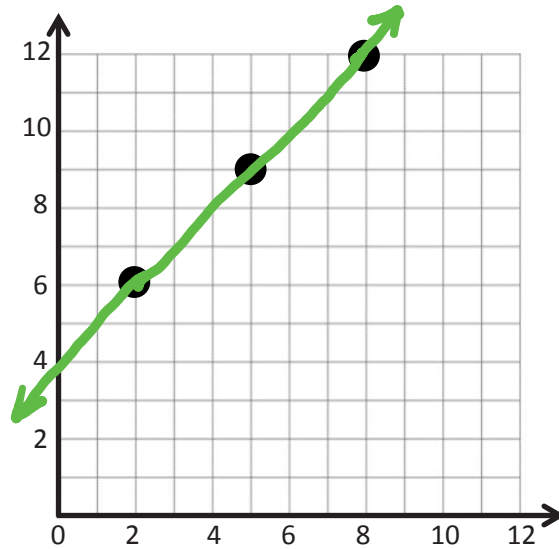
Date \_\_\_\_\_

1. Complete this table such that each  $y$ -coordinate is 4 more than the corresponding  $x$ -coordinate.

$x$	$y$	$(x, y)$
2	6	(2, 6)
5	9	(5, 9)
8	12	(8, 12)

- a. Plot each point on the coordinate plane.
- b. Use a straightedge to construct a line connecting these points.
- c. Give the coordinates of 2 other points that fall on this line with  $x$ -coordinates greater than 18.

(20, 24) and (34, 38)

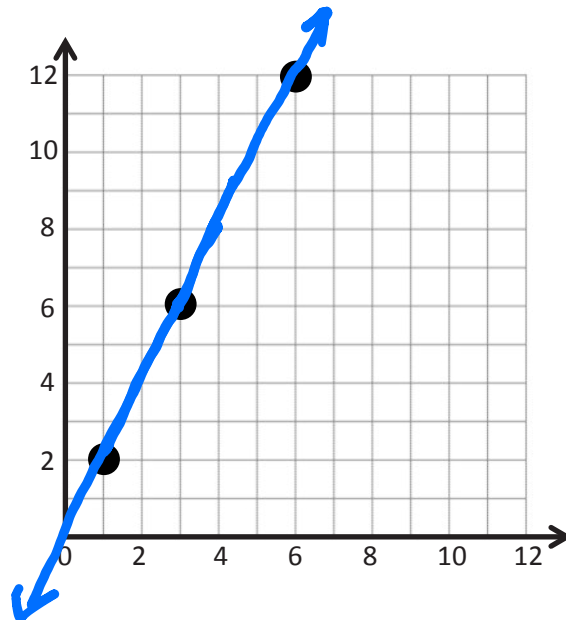


2. Complete this table such that each  $y$ -coordinate is 2 times as much as its corresponding  $x$ -coordinate.

$x$	$y$	$(x, y)$
1	2	(1, 2)
3	6	(3, 6)
6	12	(6, 12)

- a. Plot each point on the coordinate plane.
- b. Use a straightedge to draw a line connecting these points.
- c. Give the coordinates of 2 other points that fall on this line with  $y$ -coordinates greater than 25.

(13, 26) and (41, 82)



3. Use the coordinate plane below to complete the following tasks.

a. Graph these lines on the plane.

line  $\ell$ :  $x$  is equal to  $y$

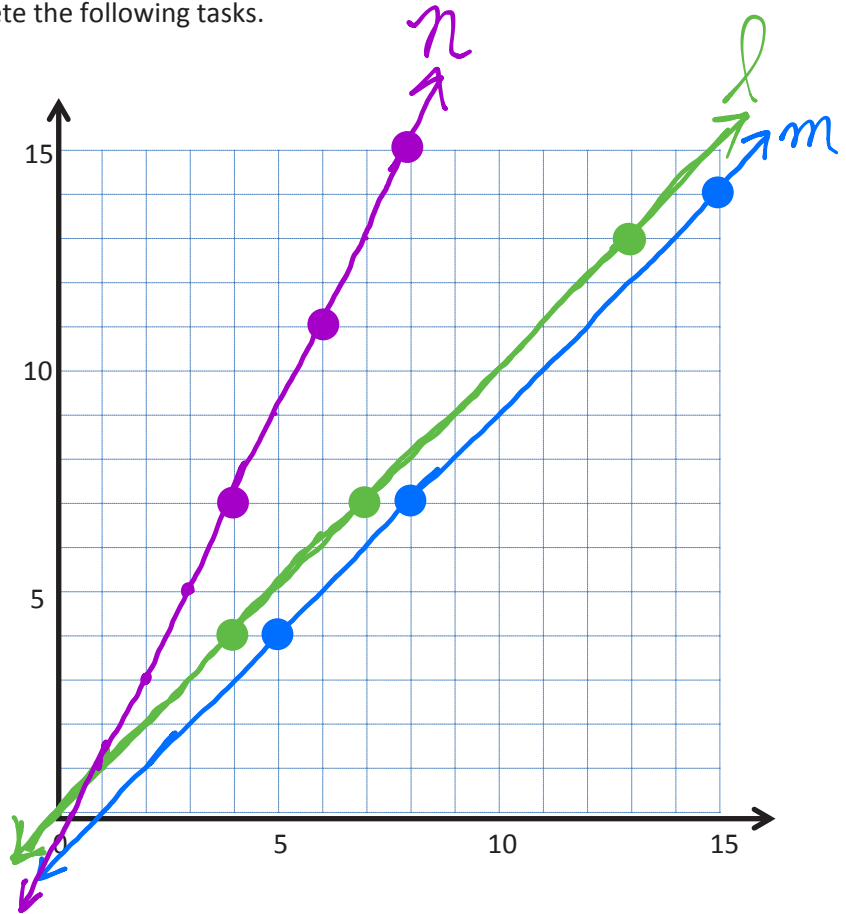
	$x$	$y$	$(x, y)$
A	4	4	(4,4)
B	7	7	(7,7)
C	13	13	(13,13)

line  $m$ :  $y$  is 1 less than  $x$

	$x$	$y$	$(x, y)$
G	5	4	(5,4)
H	8	7	(8,7)
I	15	14	(15,14)

line  $n$ :  $y$  is 1 less than twice  $x$

	$x$	$y$	$(x, y)$
S	4	7	(4,7)
T	8	15	(8,15)
U	6	11	(6,11)



b. Do any of these lines intersect? If yes, identify which ones, and give the coordinates of their intersection.

Line  $n$  intersects with Line  $l$  at  $(1,1)$ .

Line  $n$  would eventually intersect with Line  $m$ .

c. Are any of these lines parallel? If yes, identify which ones.

Lines  $l$  and  $m$  are parallel.

d. Give the rule for another line that would be parallel to the lines you listed in (c).

(Answers will vary.)

$y$  is 3 more than  $x$ .