Recall that the distance between points (a,b) and (c,d) is  $\sqrt{(c-a)^2+(d-b)^2}$ 

The point-slope form for the equation of a line with slope m that goes through the

In this case, the slope m=-2 is given and the point (5,4) on the line is given.

7. Which of the following equations is for a line with the same slope as y=-3x+2?

This line has slope m=-3 which is the same slope as the given line.

8. Which of the following equations is for a line with the same y-intercept as y=-3x+2?

The the slope-intercept formula for a line is y=mx+b , where m is the slope and b

is the y-coordinate of the point where the line hits the y-axis. This line has a y-

The line with equation  $\boldsymbol{y}=\boldsymbol{x}$  is the one and only line that meets the stated

10. Suppose that we have two sets,  $A=\{a,b\}$  and  $Z=\{x,y\}$ . How many different functions

A function F:A o Z is a rule which assigns an element  $F(a)\in Z$  to each

two assignment choices we could make: x and y.

11. How many graphs contain both the point  $A=\left(0,0\right)$  and the point  $B=\left(1,1\right)$ 

12. Suppose that  $g:\mathbb{R} o \mathbb{R}$  is a continuous function whose graph intersects the x-axis more

The function g fails the horizontal line test, so it can neither be strictly increasing nor

13. Find the slope of the line segment between the points A=(1,1) and B=(5,3).

than once. Which of the following statements is true?

g is neither strictly increasing nor strictly decreasing.

Here are the four possible functions:

F(a)=x,F(b)=y, OR

 $F(a)=y, F(b)=x, \operatorname{OR}$ 

F(a) = y, F(b) = y.

O None

 $\bigcirc$  2

0 1

Infinitely many

/ Correcto

 $\bigcirc g$  is strictly increasing.

 $\bigcirc g$  is strictly decreasing.

strictly decreasing.

All of the above.

✓ Correcto

 $\bigcirc$   $\frac{1}{2}$ 

 $\bigcirc \sqrt{20}$ 

0 4

 $\bigcirc$  2

✓ Correcto

There are two elements in A; namely, a and b. For each of these elements, there are

intercept of 2 which is the same as the given line.

9. How many lines contain both the point A=(1,1) and the point B=(2,2)?

1/1 puntos

 $\sqrt{(-1-2)^2 + (-2-2)^2} = \sqrt{(-3)^2 + (-4)^2} = \sqrt{25} = 5$ 

5. Find the slope of the line segment between the points A=(0,1) and B=(1,0).

The slope of this line segment is  $\dfrac{0-1}{1-0}=-1$ 

point  $(x_0, y_0)$  is  $y - y_0 = m(x - x_0)$ .

In this case we have:

● -1

 $\bigcirc$  1

 $\bigcirc \sqrt{2}$ 

✓ Correcto

point (5,4).

 $\bigcirc$  (5,4)

y - 4 = 2(x - 5)

y-4=-2(x-5)

y-5=-2(x-4)

✓ Correcto

 $\bigcirc y = 5x + 2$ 

y = -3x - 8

 $\bigcirc y = 8x - 3$ 

 $\bigcirc y = 8x - 3$ 

0 y = -3x - 8

✓ Correcto

 $\bigcirc y = 5x$ 

O None

 $\bigcirc$  2

A 1

infinitely many

requirements.

F:A o Z are possible?

O There are infinitely many

element  $a \in A$ .

There are none

4

 $\bigcirc$  1

 $\bigcirc y = 5x$ 

 $\bigcirc$  0