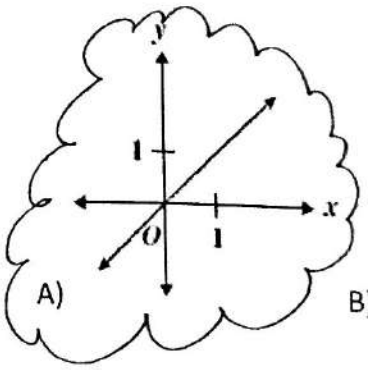
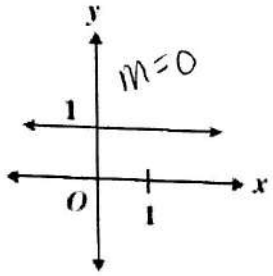
Key

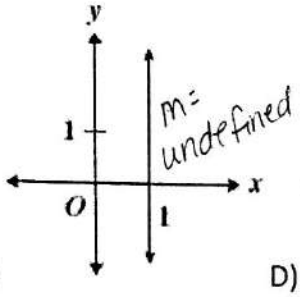
1) Which of the following is the graph of a line with a slope of 1?



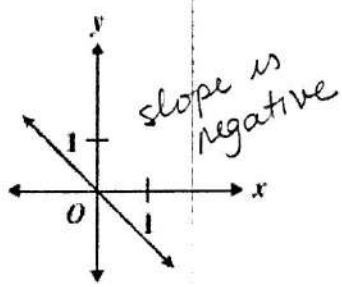
A)



B)



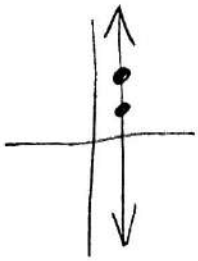
C)



D)

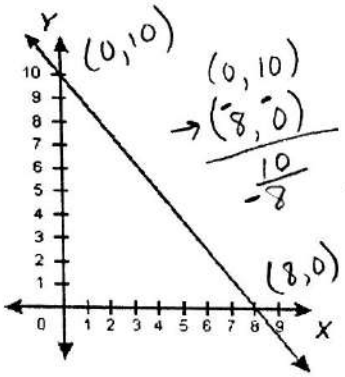
2) The slope of the line through points (1, 1) and (1, 2) is: $x = 1$

A) zero B) negative C) positive D) undefined



(1, 2)
OR → (1, 1)
1
0
"underneath undefined"

3) What is the slope of the line on the graph below?



(0, 10)
(0, 10)
→ (8, 0)
10
−8
(8, 0)

A) $-\frac{5}{4}$

B) $-\frac{4}{5}$

C) $\frac{4}{5}$ positive

D) $\frac{5}{4}$ positive

4) Which algebraic expression corresponds to "half of the sum of 3x and 4"?

A) 6x no ½

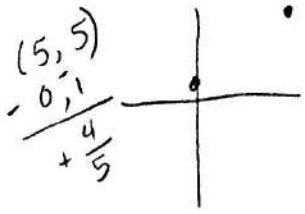
B) 3x + 2 no ½

C) $\frac{1}{2}(3x) + 4$
½ of 3x plus 4

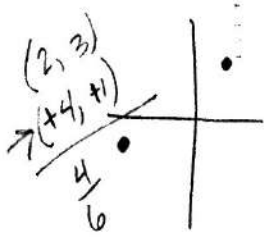
D) $\frac{1}{2}(3x + 4)$

5) Which of these sets of ordered pairs would define a line with a negative slope?

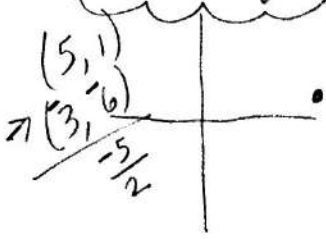
A) (5, 5) (0, 1)


(5, 5)
− 0, 1
4
5

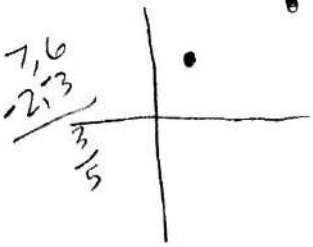
B) (2 ,3) (-4, -1)


(2, 3)
(+4, +1)
4
6

C) (3, 6) (5, 1)


(5, 1)
(3, 6)
−5
2

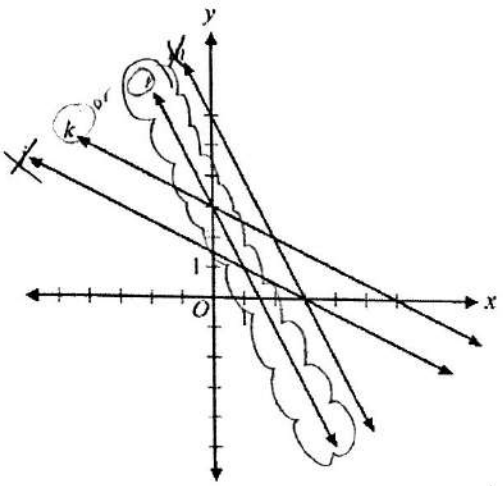
D) (2, 3) (7, 6)


7, 6
2, 3
3
5

6) Michael runs 3.5 miles in 30 minutes. If he continues at this rate for 2 hours, determine his rate of change. $\frac{3.5}{30} = \frac{7}{60}$ = (found /hour because all the answers = 120 min

A) 3.5 miles/hour B) 7 miles/hour C) 14 miles/hour D) 10 miles/hour

7) Use this figure to answer the question. Which line in the figure above has a *y*-intercept of 3 and a slope of -2?



A) *j*

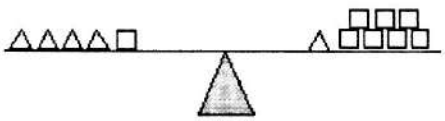
B) *k*

C) *l*

D) *m*

find the lines w/ y-intercept of 3 then compare slopes

8) The balance below shows the equation $4x + 1 = x + 7$. What is the value of *x*?



$-x \quad -1$

$3x = 6$

A) $\frac{8}{5}$ B) 2 C) $\frac{8}{3}$ D) 3

9) Linda is one year less than twice as old as her brother Paul. Which formula below correctly represents this situation?

A) $L = 2P$ B) $L = 2(P - 1)$ C) $L = 2P - 1$ D) $L = \frac{1}{2}(P - 1)$

10) If the equations $y = 3x + 5$ and $y = 3x - 5$ were graphed, which statement below would be true?

A) The two lines will be parallel.

B) The two lines would intersect at the origin.

C) The two lines would intersect at right angles.

D) The two lines would intersect at the point (5, -5).

slopes match so No Solution

Matching slopes means parallel lines