

## Horizontal and Vertical Lines Worksheet

Explain questions with stars next to question numbers.

1) What is slope of  $x = 5$ ?

undefined

2) What is slope of  $y = -2$ ?

0

3) What is slope of  $y = 4$ ?

0

4) What is slope of  $y = 3x$ ?

3

5) What is slope of  $x = -\frac{2}{5}$ ?

undefined

6) What is slope of  $y = -\frac{2}{5}x$ ?

$-\frac{2}{5}$

7) What kind of line is  $y = 6$ ?

Horizontal

8) What kind of line is  $x = -2$ ?

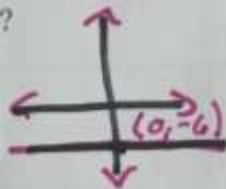
Vertical

9) What kind of line is  $y = 2x$ ?

Positive

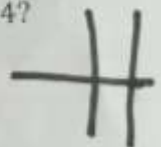
10) What is the y-intercept of  $y = -6$ ?

$(0, -6)$



11) What is the x-intercept of  $x = 4$ ?

$(4, 0)$



12) What is the equation of any horizontal line?

$y = b$

13) What is the equation of any vertical line?

$x = a$

Write the standard form of the equation of the line through the given information.

HOYVUX

14)  $(-3, 2)$ , slope = undefined

$x = -3$

15)  $(-3, -2)$ , slope = 0

$y = -2$

16)  $(5, 1)$ , slope = undefined

$x = 5$

17)  $(3, 0)$ , slope = 0

$y = 0$

18)  $(5, -2)$  and  $(0, -2)$   $m = 0$

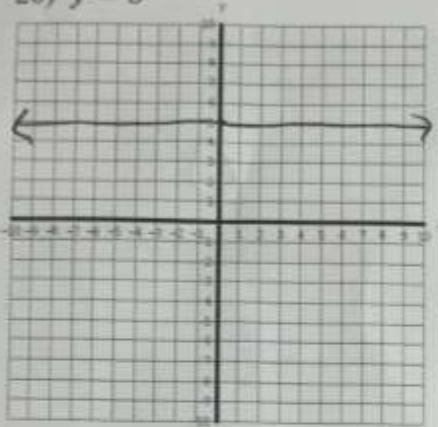
$y = -2$

19)  $(-5, 3)$  and  $(-5, 5)$   $m = \text{undefined}$

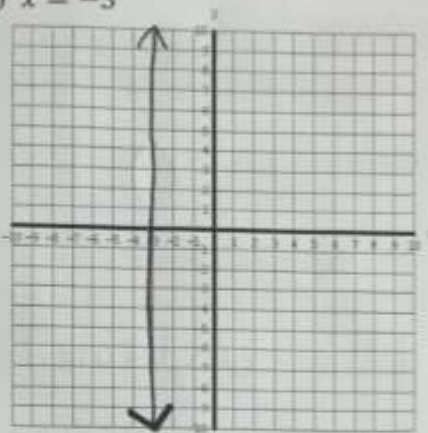
$x = -5$

Graph the following equations.

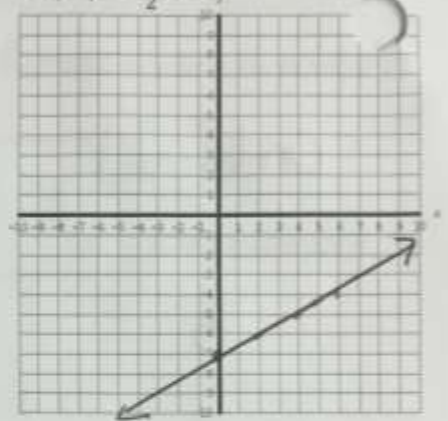
20)  $y = 5$



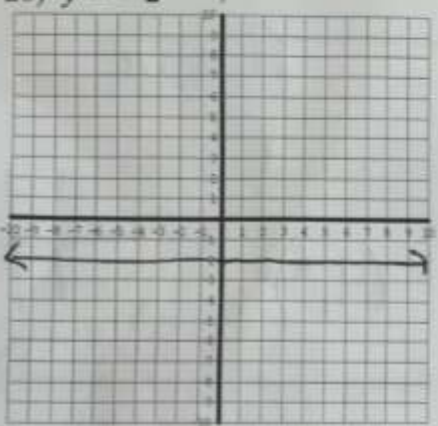
21)  $x = -3$



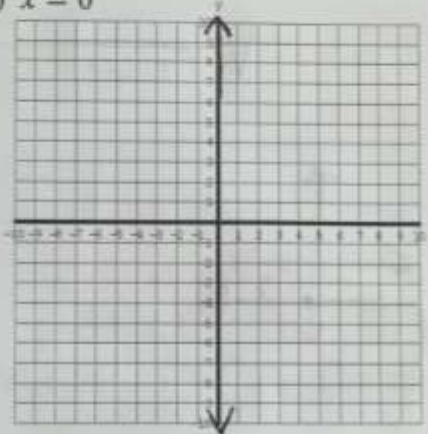
22)  $y = \frac{1}{2}x - 7$



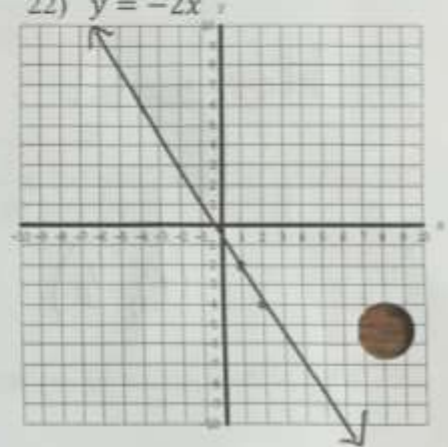
20)  $y = -2$



21)  $x = 0$



22)  $y = -2x$



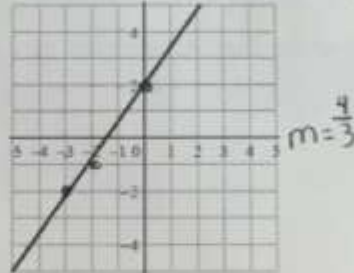
Identify the equation of each graph. (HINT: FIND SLOPE & Y-INTERCEPT)

23)



$y = -1$

24)



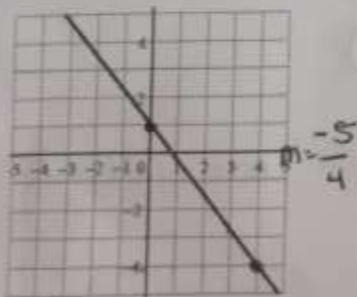
$y = \frac{4}{3}x + 2$

25)



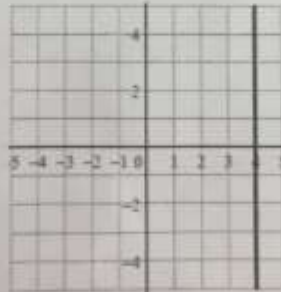
$x = 2$

23)



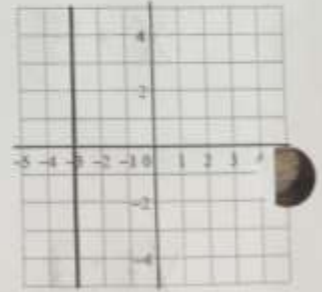
$y = -\frac{5}{4}x + 1$

24)



$x = 4$

25)



$x = -3$