

Aim: How do we review for the test?

Conway
10/5

WARM-UP #5

1) How are the slopes of parallel lines related to each other? they are the same!

2) How are the slopes of perpendicular lines related to each other? Negative Inverse

Give the slope of a line perpendicular to the one whose slope is given: (Flip & Change Signs)

a) $m = 3$ $-\frac{1}{3}$

b) $m = -\frac{2}{3}$ $\frac{3}{2}$

c) $m = 0$ undefined

Convert each of the following equations to slope-intercept form.

What is the slope? What is the y-intercept?

3) $5x - 2y = 8$

$-2y = 8 - 5x$

$y = \frac{5}{2}x - 4$

$m = \frac{5}{2}$ $b = -4$

4) $x + y = 9$

$y = -x + 9$

$m = -1$ $b = 9$

Put into best standard form. Identify the x and y-intercepts.

5) $4y = 2x + 12$

x -intercept = -6

y -intercept = 3

$2x - 4y = -12$

$x - 2y = -6$

Write the equations of the following lines in slope-intercept form.

6) line with slope = 2 through (1, -2)

$y = 2x + b$

$-2 = 2(1) + b$

$-2 = 2 + b$

$-4 = b$

$y = 2x - 4$

7) line parallel to $y = -7x + 3$ and through (0, 1)

$y = -7x + b$

$1 = -7(0) + b$

$1 = b$

$y = -7x + 1$

8) line through (-2, 1) and (6, 3)

$\frac{3-1}{6-(-2)} = \frac{2}{8} = \frac{1}{4}$

$y = \frac{1}{4}x + b$

$1 = \frac{1}{4}(-2) + b$

$1 = -\frac{1}{2} + b$

$y = \frac{1}{4}x + \frac{3}{2}$

9) What is the slope of horizontal lines?

zero

Constant ~~zero~~ function

10) What is the slope of vertical lines?

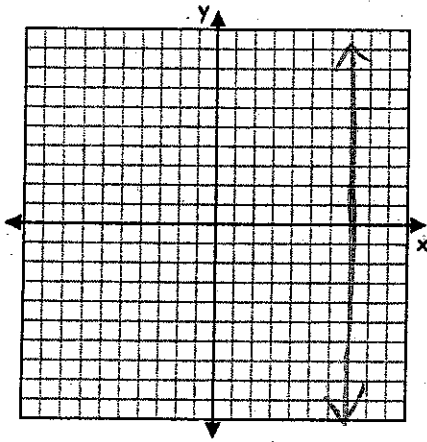
undefined

no slope

Based on the information given, would each line described be horizontal or vertical?
Graph each line.

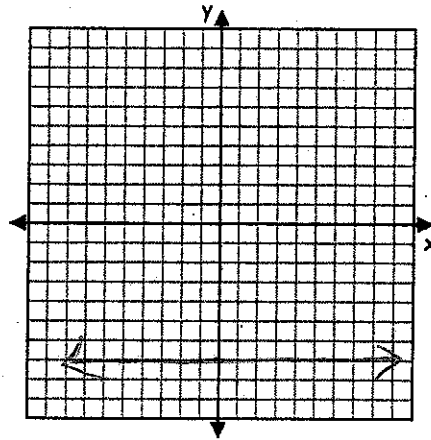
11) equation is $x = 7$

Vertical Horizontal



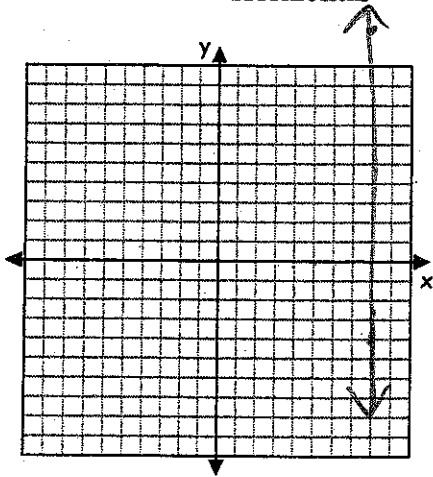
12) equation is $y = -10$

Vertical Horizontal



13) through $(8, 12)$ and $(8, -4)$

Vertical Horizontal



14) through $(5, 5)$ and $(-2, 5)$

Vertical Horizontal

