

1. Describe the graph of $y = 4$.

Every point has $y = 4$

Answer: horizontal line through (0,4)

2. Describe the graph of $x = -2$.

Every point has $x = -2$

Answer: vertical line through (-2,0)

3. What is the slope of $y = 7$?

Flat: rise 0

Answer: 0

4. What is the slope of $x = 3$?

Run is 0 - division by zero

Answer: undefined

5. Is $y = 5$ a function?

Vertical line test passes

Answer: Yes

6. Is $x = 1$ a function?

A vertical line hits it infinitely

Answer: No

7. Write the equation of the horizontal line through (6, -3).

Horizontal keeps the y

Answer: $y = -3$

8. Write the equation of the vertical line through (6, -3).

Vertical keeps the x

Answer: $x = 6$

9. A line passes through (2, 5) and (2, -1). Write its equation and slope. ★ challenge

Same x both points - vertical

Slope: $(5 - (-1)) / (2 - 2) = 6/0$

Answer: $x = 2$; slope undefined

10. Rectangle corners at (1,2), (5,2), (5,7), (1,7). Give the equations of all four sides. ★ challenge

Bottom/top horizontal; sides vertical

Answer: $y = 2$, $y = 7$, $x = 1$, $x = 5$