Find the slope of the lines in the drawing. Let each square be one unit. (Hint: Draw a right triangle and make a step.) Write as a fraction in simplest form.

Line A

Line B

Line C

1. Line A: Slope = \_\_\_\_\_\_\_\_\_\_
2. Line B: Slope = \_\_\_\_\_\_\_\_\_\_
3. Line C: Slope = \_\_\_\_\_\_\_\_\_\_

**Find the slope of the line that passes through the following two points.**

**Show your work.**

4. (6, -2) and (4, 8) 5. (-5, 10) and (6, -4)

6. (16, -9) and (14, -7) 7. (6, 0) and (0, 4)

**Complete the table, graph the line, and state the slope and y-intercept.**

8.  slope = \_\_\_\_\_ y-intercept = \_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| x |  | y |
| -4 |  |  |
| -2 |  |  |
| 0 |  |  |
| 2 |  |  |
| 4 |  |  |

9. **Name the coordinates of each point:**

A

B

C

D

E

F

G

A( , )

 B( , )

 C( , )

 D( , )

 E( , )

 F( , )

 G( , )

**State the slope, y-intercept, and write the equation for each line.**

10. Line **A**: Slope = \_\_\_\_\_\_\_\_\_\_\_\_

Line A

Line B

Line C

 y-intercept =\_\_\_\_\_\_\_\_\_

 equation=\_\_\_\_\_\_\_\_\_\_\_

11. Line **B**: Slope = \_\_\_\_\_\_\_\_\_\_\_\_

 y-intercept =\_\_\_\_\_\_\_\_\_

 equation=\_\_\_\_\_\_\_\_\_\_\_

12. Line **C**: Slope = \_\_\_\_\_\_\_\_\_\_\_\_

 y-intercept =\_\_\_\_\_\_\_\_\_

 equation=\_\_\_\_\_\_\_\_\_\_\_\_

**Solve the equation. Show all work.**

13. $4\left(x-1\right)=-32$ 14. $2\left(6x-8\right)=3(4x-5)$

15. $7\left(3-x\right)=2\left(2x+9\right)+3$ 16. $9-3\left(2x-1\right)+4x=6x-2(4-x)$