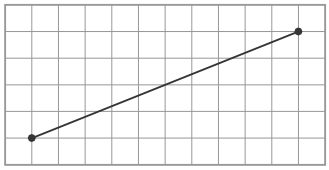
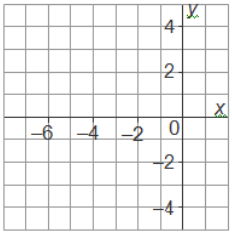
Linear Relations Review

1. Find the slope of the line segment.



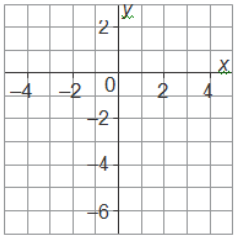
2. Find the slope of the line through A(-4, 3) and B(1, 6)
3. Draw a line CD that passes through C(-3, -2), and has slope -3



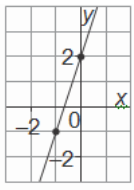
4. a) Find the slope of the line through each pair of points:
   i) A(0, 5) and B(4, 2)
   ii) C(-1, 3) and D(2, 7)
   iii) E(-2,-3) and F(4, 5)

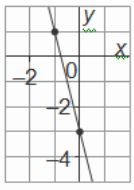
   b) Which lines in part a) are parallel? Which lines are perpendicular?

5. Graph $y = \frac{1}{2}x - 3$



6. For each line:
   - Write the slope and y-intercept
   - Write an equation in slope-intercept form

a) 

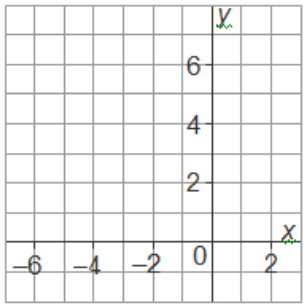
b) 

7. For the line $y-4=\frac{1}{2}(x+3)$

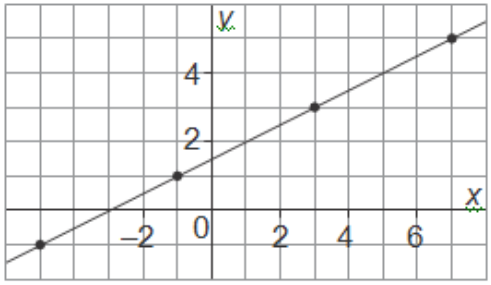
   a. Write the slope of the line:

   b. Write the coordinates of a point on the lineL

   c. Graph the line



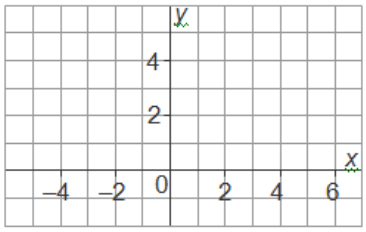
8. a) Write an equation for this line in point slope form.



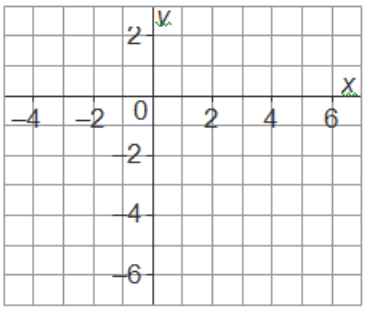
   b) write the equation in part a) in slope-intercept form.

9. Graph each line.

   a. 3x + 6y – 12 = 0



   b. 2x – 3y – 9 = 0



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1. $\frac{2}{5}$ **2.** $\frac{3}{5}$

4. a) i) $-\frac{3}{4}$ **ii)** $\frac{4}{3}$ **iii)** $\frac{4}{3}$

b) Parallel: CD and EF

Perpendicular: AB and CD; AB and EF

6. a) Slope: 3; *y*-intercept: 2; $y = 3x + 2$

b) Slope:–4; *y*-intercept: –3; $y = -4x - 3$

7. a) $\frac{1}{2}$ **b)** (–3, 4)