Straight Line

1. Calculate the gradient of the line joining:

   a) (2, 5) and (-1, -4)

   b) (1, 5) and (-2, -1)

   c) (6, -1) and (12, -3)

   d) (8, 4) and (4, 3)

2. Find the gradient and y-intercept of the following straight lines:-

   a) $y = 3x + 4$

   b) $y = 8 - 4x$

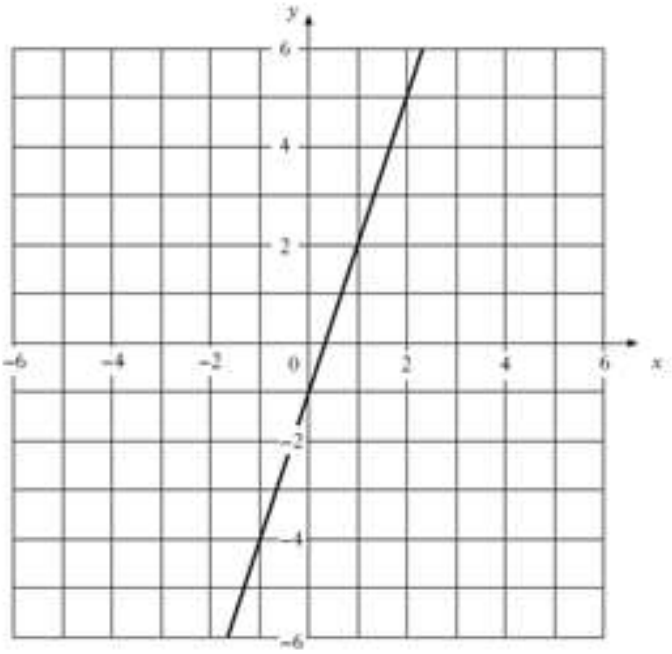
   c) $3y = 6x + 9$

   d) $x - 2y = 10$

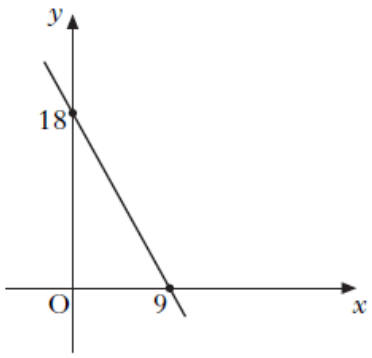
   e) $3y = x$

   f) $5x - 10y - 4 = 0$

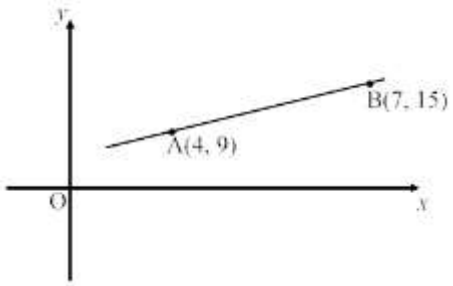
3. Find the equation of the line in the diagram below.



4. A straight line cuts the x – axis at the point (9, 0) and the y – axis at the point (0, 18) as shown. Find the equation of this line.



5. Find the equation of line AB as shown in the diagram below.



6. Find the equation of the line which passes through the points (1, -3) and (-3, 5)