

# Equations of Parallel Lines



**Section A** Write down the pairs of parallel lines from the equations below.

1)  $y = 2x - 1$

2)  $y = 2 - 3x$

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

4)  $x - 2y = 8$

5)  $3y - x = 1$

6)  $5y - 10x = 7$

7)  $3x + y = 5$

8)  $6y = 2x - 9$

**Section B** Write the equation of the parallel line through the point given.

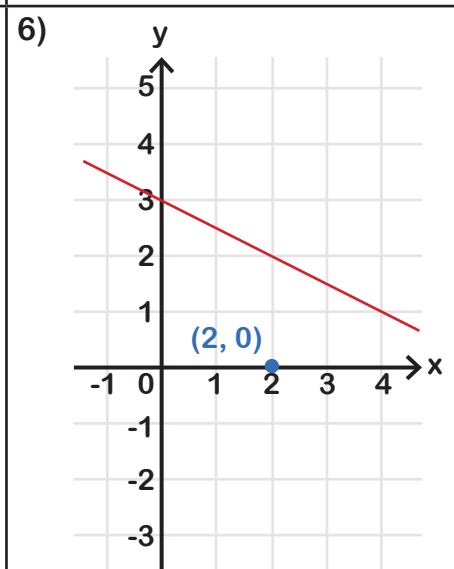
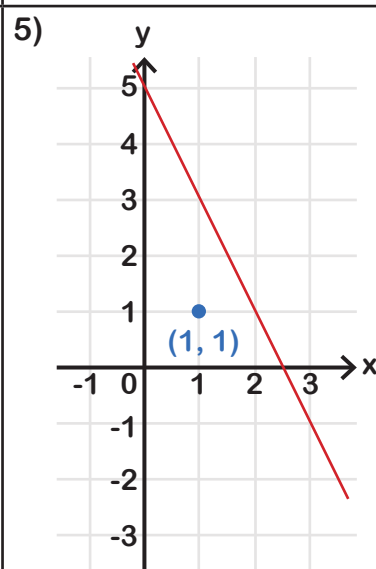
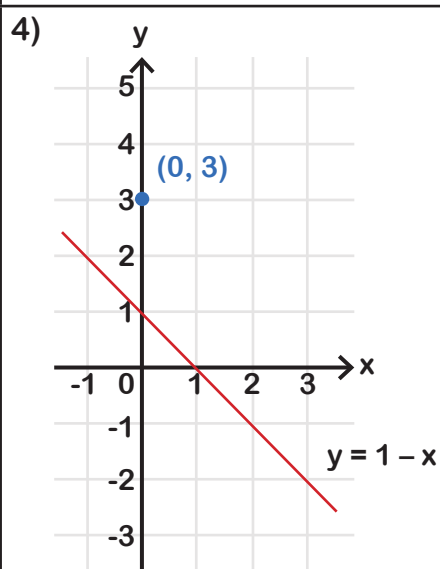
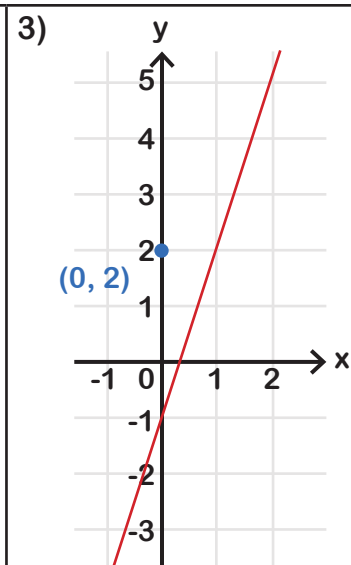
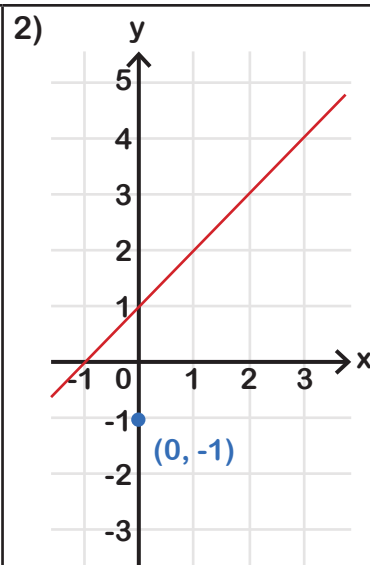
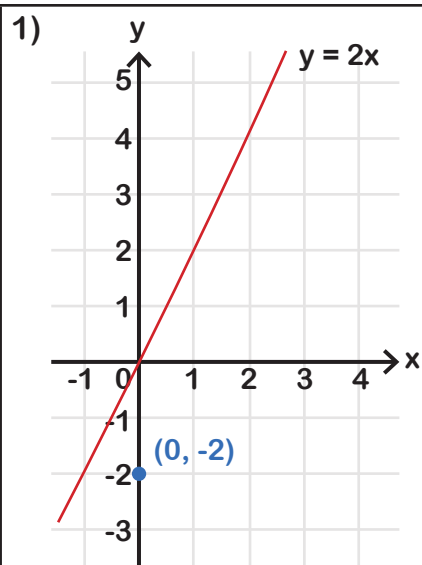
1) Parallel to  $y = x$  through  $(0, 2)$

2) Parallel to  $y = 2x$  through  $(0, -3)$

3) Parallel to  $y = 5x$  through  $(0, 1)$

4) Parallel to  $y = -3x$  through  $(0, -2)$

**Section C** Write the equation of the parallel line through the point shown.



# Equations of Parallel Lines



**Section D** Find the equation of the parallel line through the given point.

1) Parallel to  $y = x - 5$ , through  $(2,3)$

2) Parallel to  $y = 2x - 4$ , through  $(1,3)$

3) Parallel to  $y = \frac{1}{2}x + 2$ , through  $(4,1)$

4) Parallel to  $2x + 3y = 4$ , through  $(2,1)$

**Section E** Find the line parallel to the line through the given points.

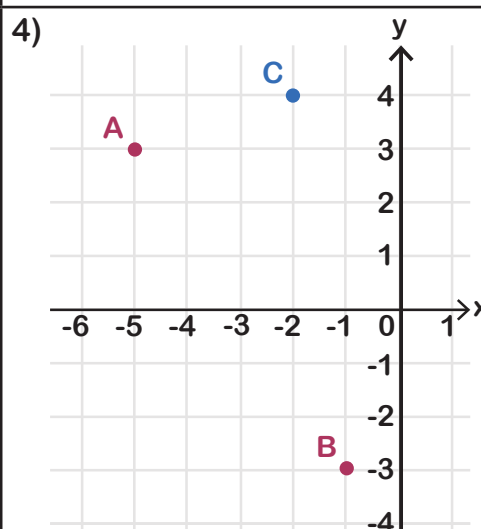
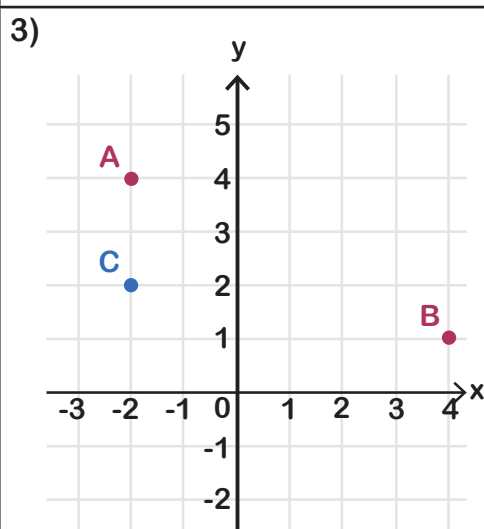
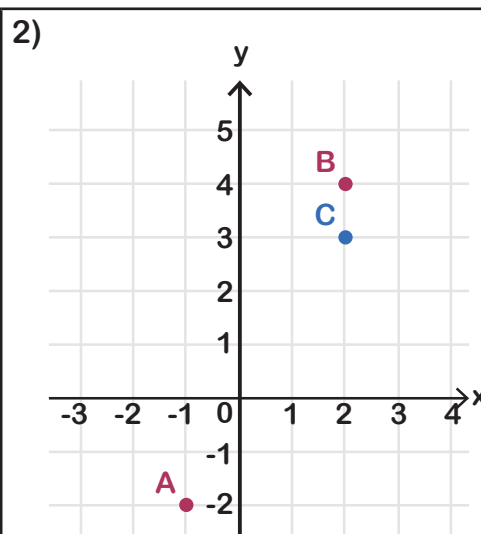
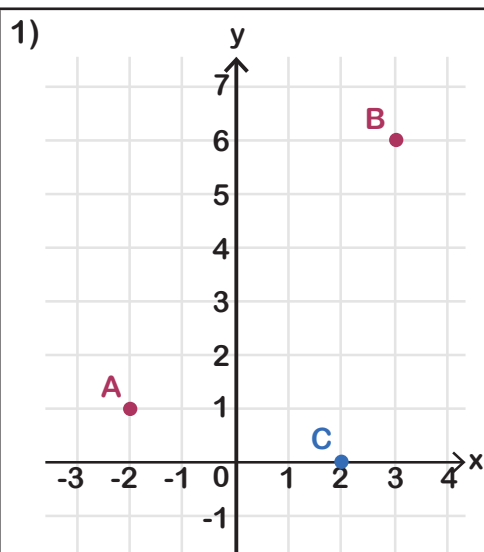
1) Goes through  $(0,0)$  and parallel to the line through  $(0,4)$  and  $(1,7)$  \_\_\_\_\_

2) Goes through  $(0,0)$  and parallel to the line through  $(0,3)$  and  $(1,5)$  \_\_\_\_\_

3) Goes through  $(0,1)$  and parallel to the line through  $(0,-1)$  and  $(1,3)$  \_\_\_\_\_

4) Goes through  $(0,-2)$  and parallel to the line through  $(0,2)$  and  $(1,-1)$  \_\_\_\_\_

**Section F** Find the line that goes through C which is parallel to the line through A and B.



**EXTENSION:**  
Prove that the line passing through the points  $(-13, -4)$  and  $(12, 6)$  is parallel to the line  $2x - 5y = 9$

**ANSWER:**