

(C1-5.3) Name:

Homework Questions 3 – Finding the Equation of a Line given One point and the Gradient

1. Find the equation of the line which has a gradient of 5 and passes through the point (3,7).
Write your answer in the form $y=mx+c$

Ans

2. Find the equation of the line which has a gradient of -2 and passes through the point (4,3).
Write your answer in the form $ax+by+c=0$

Ans

3. The line $y=5x-10$ meets the x-axis at the point A. Find the coordinate of point A and hence find the equation of the line with gradient 3 that passes through point A. Write your answer in the form $y=mx+c$

Ans

4. The line $y=2x-7$ meets the y-axis at the point B. Find the coordinate of point B and hence find the equation of the line with gradient 4 that passes through point B. Write your answer in the form $ax+by+c=0$

Ans

5. The lines $y=3x-2$ and $y=2x+1$ intersect at point C. Find the coordinate of point C and hence find the equation of the line with gradient -0.25 that passes through point C. Write your answer in the form $ax+by+c=0$

Ans

6. The line $y=4x-8$ meets the x-axis at point D, the line $y=2x-4$ meets the y axis at point E. Find the gradient of the line DE and find the equation of the line joining DE. Leave your answer in the form $ax+by+c=0$

Ans