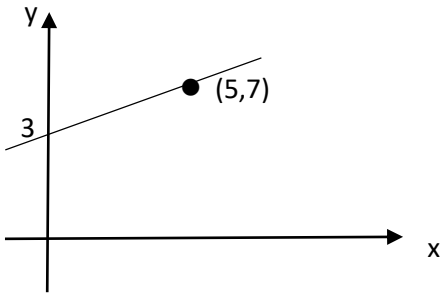
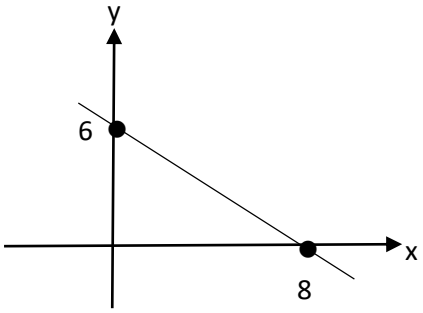
National 5 Final Exam Revision	
Geometric Skills	Straight Line Gradients and Graphs
Average Allocation	2 / 3 Marks

1. A straight line passes through the points A(k,4) and B(2,1). Calculate k if the gradient of the line AB is $\frac{1}{2}$.
2. Calculate the gradient of the line PQ which is parallel to the line AB passing through the points A(-1,3) and B(1,-2).
3. Copy and complete: The gradient of a horizontal line is _____
4. The line passing through the points P(a,-6) and Q(3,2) is $\frac{4}{3}$. Find the value of a.
5. Find the gradient of the line AB shown below.



6. C is the point (2,6) and D is the point (-1,-5). Find the gradient of the line ST, parallel to the line which is CD.
7. Copy and complete: The gradient of a vertical line is _____.
8. Find the gradient of the line joining the points S(2,-5) and T(-5,1).
9. Work out the gradient of the line shown below. Give your answer in its simplest form.



10. The line KL passes through (4,7) and (a,-1) has a gradient of 2. Find the value of a.
11. S has coordinates (-3,-5) and T has coordinates (-7,3). Find the gradient of the line joining these points.
12. Find the gradient of the line shown below. Leave your answer in its simplest form.