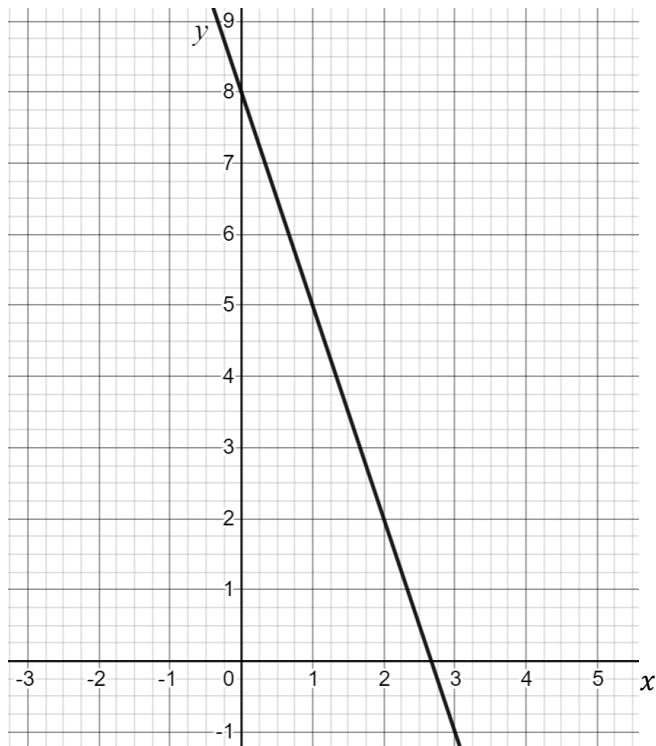


Gradient of a Straight Line Exam Practice

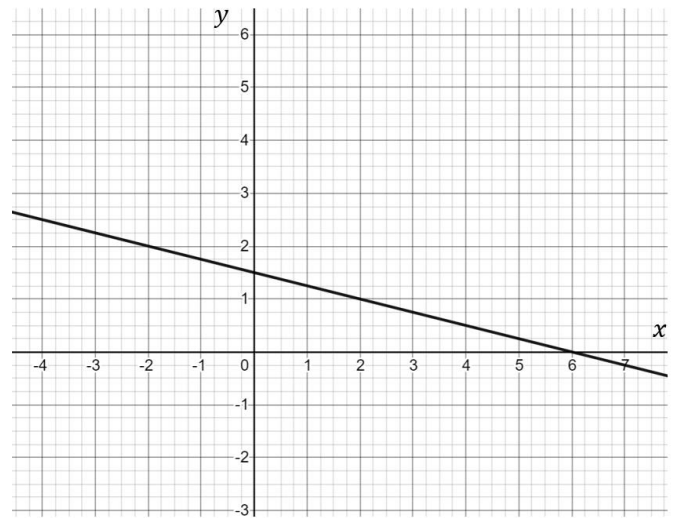


Q1. Find the gradient of the line:



(1 mark)

Q2. a) Find the gradient of the line:

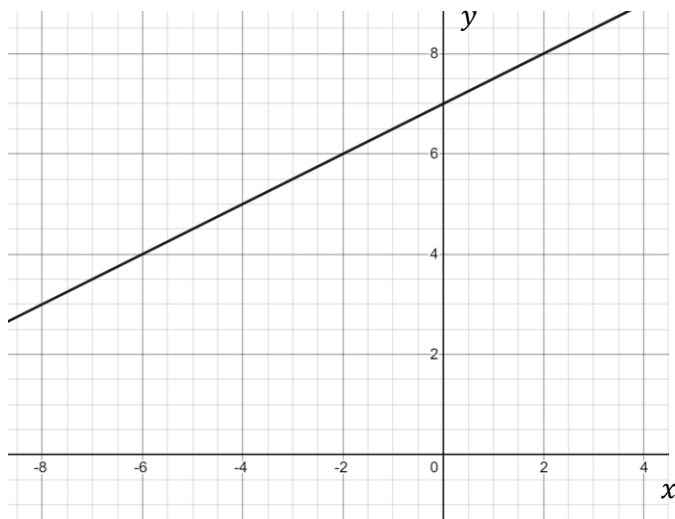


(1 mark)

b) Is the point $(18, -3)$ on the line?
Justify your answer.

(2 marks)

Q3. a) Find the gradient of the line:

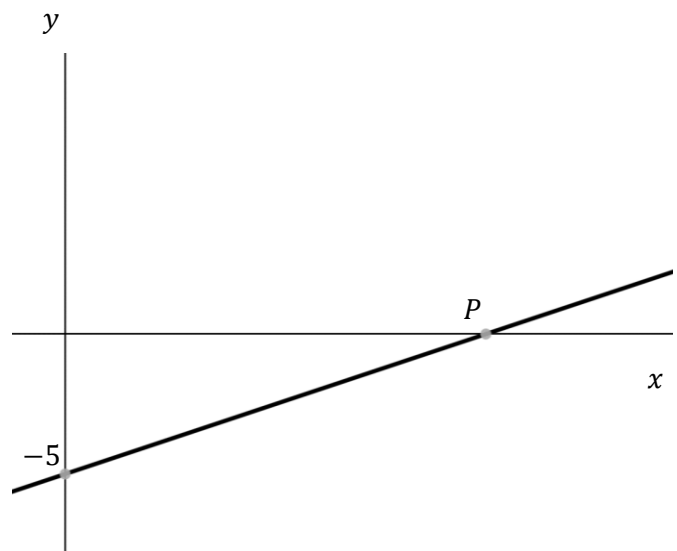


(1 mark)

b) Is the point $(10, 14)$ on the line?
Justify your answer.

(2 marks)

Q4. The gradient of the line shown below is $\frac{1}{3}$. Work out the co-ordinates of the point P.



(2 marks)



Q5. Work out the gradient of the line segment which has end-points A and B where $A = (2, 5)$ and $B = (6, -3)$

(2 marks)

Q6. A line passes through the points $A = (-7, 2)$ and $B = (8, -4)$. Work out the gradient of the line, giving your answer as a simplified fraction.

(2 marks)

Q7. The line CD passes through the points $C = (-3, 4)$ and $D = (k, 12)$. The gradient of CD is 4. Work out the value of k.

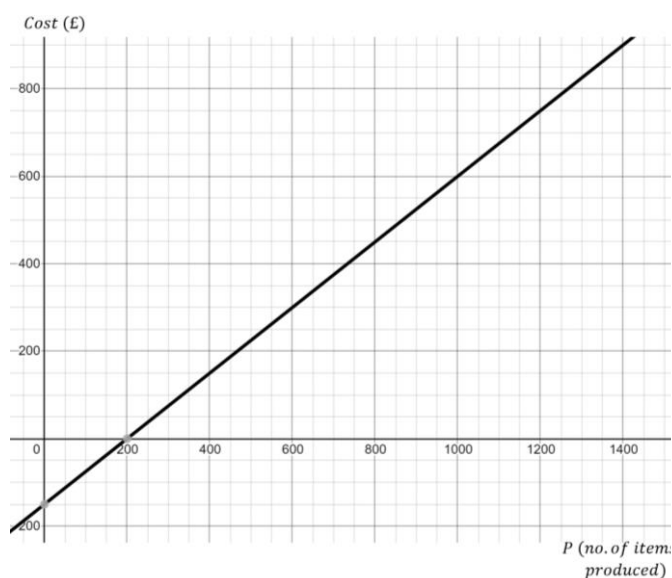
(2 marks)

Q8. The line AB passes through the points $A(k, -9)$ and $(4, 12)$. The gradient of AB is $-\frac{2}{3}$. Work out the value of k.

(2 marks)

Applied Problems

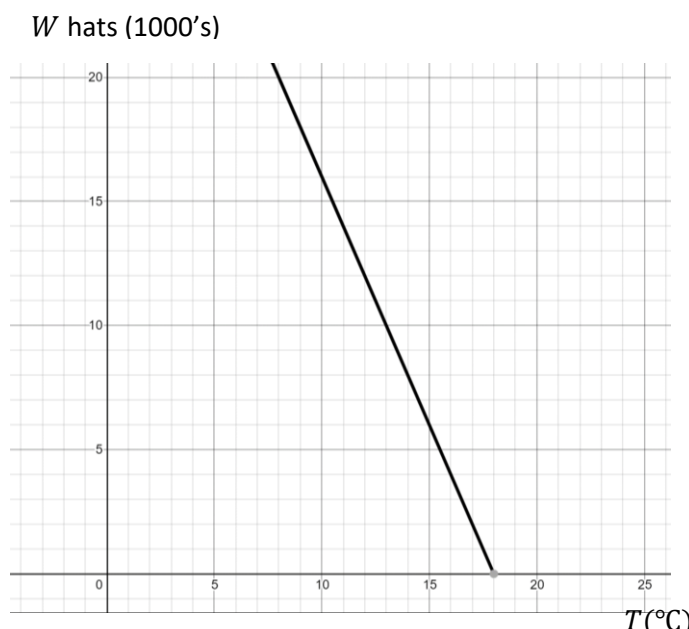
Q9. The line is a model of the cost to produce different number of items at a factory.



a) Work out the gradient of the line.
(1 mark)

b) Interpret your answer to part (a) in the context of the model.
(1 mark)

Q10. The line is a model of the sales of W of wool hats (1000's) at various temperatures T (°C).



a) Work out the gradient of the line.
(1 mark)

b) Interpret your answer to part (a) in the context of the model.
(1 mark)