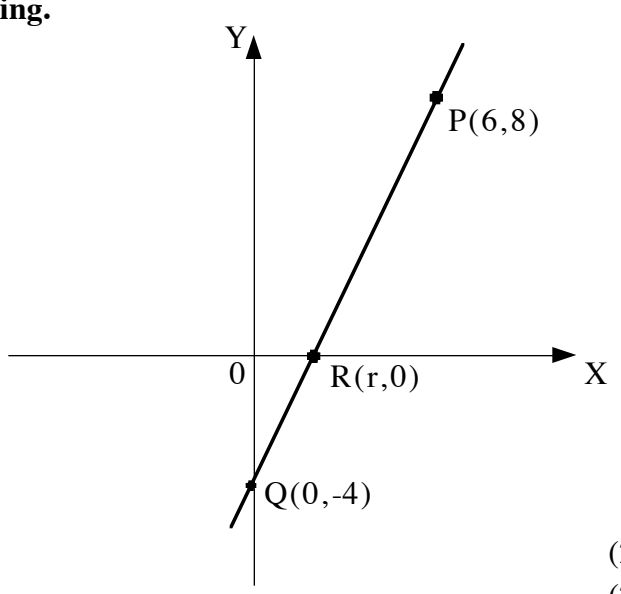
HOME EXERCISE 10

Set out carefully all appropriate working.

1. In the graph shown, the line passes through the points P(6,8) and Q(0,-4).



(a) Find the gradient of the line PQ. (2)

(b) State the equation of the line PQ. (2)

(c) **Hence** find the co-ordinates of R, the point where the line meets the X-axis. (2)

2. $f(x) = 20 - 3x$

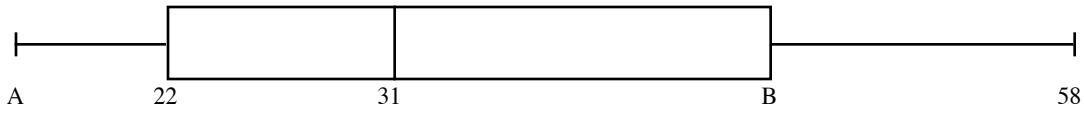
(a) find the image of 3 (1)

(b) find $f(-2)$ (2)

(c) if $f(t) = 8$, find the value of t. (2)

3. Solve the inequality: $3x - 5 > 13$ (2)

4.



The box plot shown illustrates some statistical results.
The range of the results is 42 and the semi-interquartile range is 12.

(a) Find the values of A and B. (3)

(b) State the percentage of the results that lie between 22 and 58. (1)

5. Factorise **fully**: $5t^2 + 15t - 20$ (3)

Total 20 marks