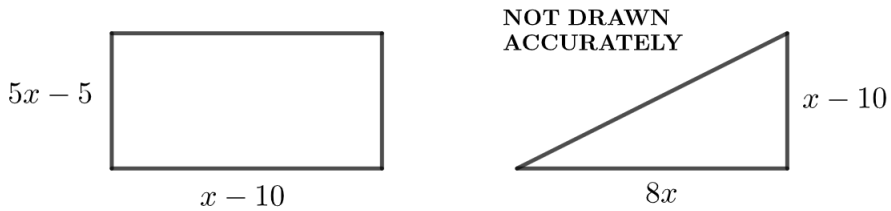
Question 1

The graph of $y = 7\,x + 2$ is reflected in the y-axis to give graph P.
Work out the equation of graph P.

Question 2

The area of the rectangle is greater than the area of the triangle.
Find the set of possible values of x.



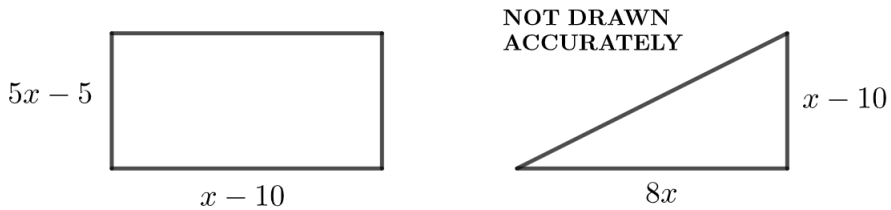
Question 1

The graph of $y = 7\,x + 2$ is reflected in the y-axis to give graph P.
Work out the equation of graph P.

A reflection of the graph of $y = f(x)$ in the y-axis gives the graph of $y = f(-x)$.
So the equation of graph P is $y = -7\,x + 2$.

Question 2

The area of the rectangle is greater than the area of the triangle.
Find the set of possible values of x.



$$(5x - 5)(x - 10) > \frac{8x(x - 10)}{2}$$

$\Rightarrow\ 5\,x^2 - 55\,x + 50 > 4\,x^2 - 40\,x$

$\Rightarrow\ x^2 - 15\,x + 50 > 0$

$\Rightarrow\ x^2 - 15\,x + 50 > 0\ \Rightarrow (x - 5)(x - 10) > 0$

$\Rightarrow\ x > 10$ (ignore $x <\ 5$ since lengths must be positive)