3.6) Inequalities on graphs
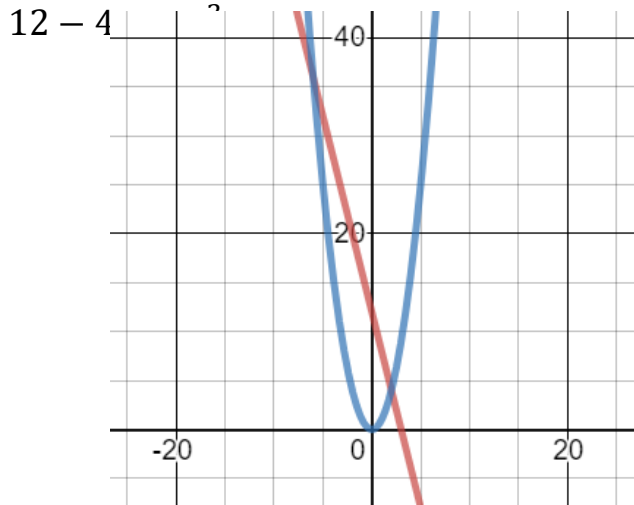
Worked example

L_1 has equation $y = 12 - 4x$.
L_2 has equation $y = x^2$.
The diagram shows a sketch of L_1 and L_2 on the same axes.
a)   Find the coordinates of the points of intersection.
b)   Hence write down the solution to the inequality
$12 - 4$ ⎯⎯

Your turn

L_1 has equation $y = 12 + 4x$.
L_2 has equation $y = x^2$.
The diagram shows a sketch of L_1 and L_2 on the same axes.
a)   Find the coordinates of the points of intersection.
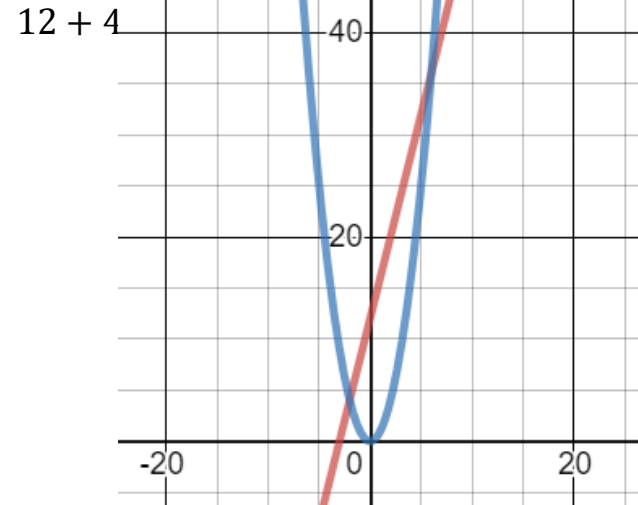b)   Hence write down the solution to the inequality
$12 + 4$ ⎯⎯

a) $(6, 36)$ and $(-2, 4)$
b) $-2 < x < 6$