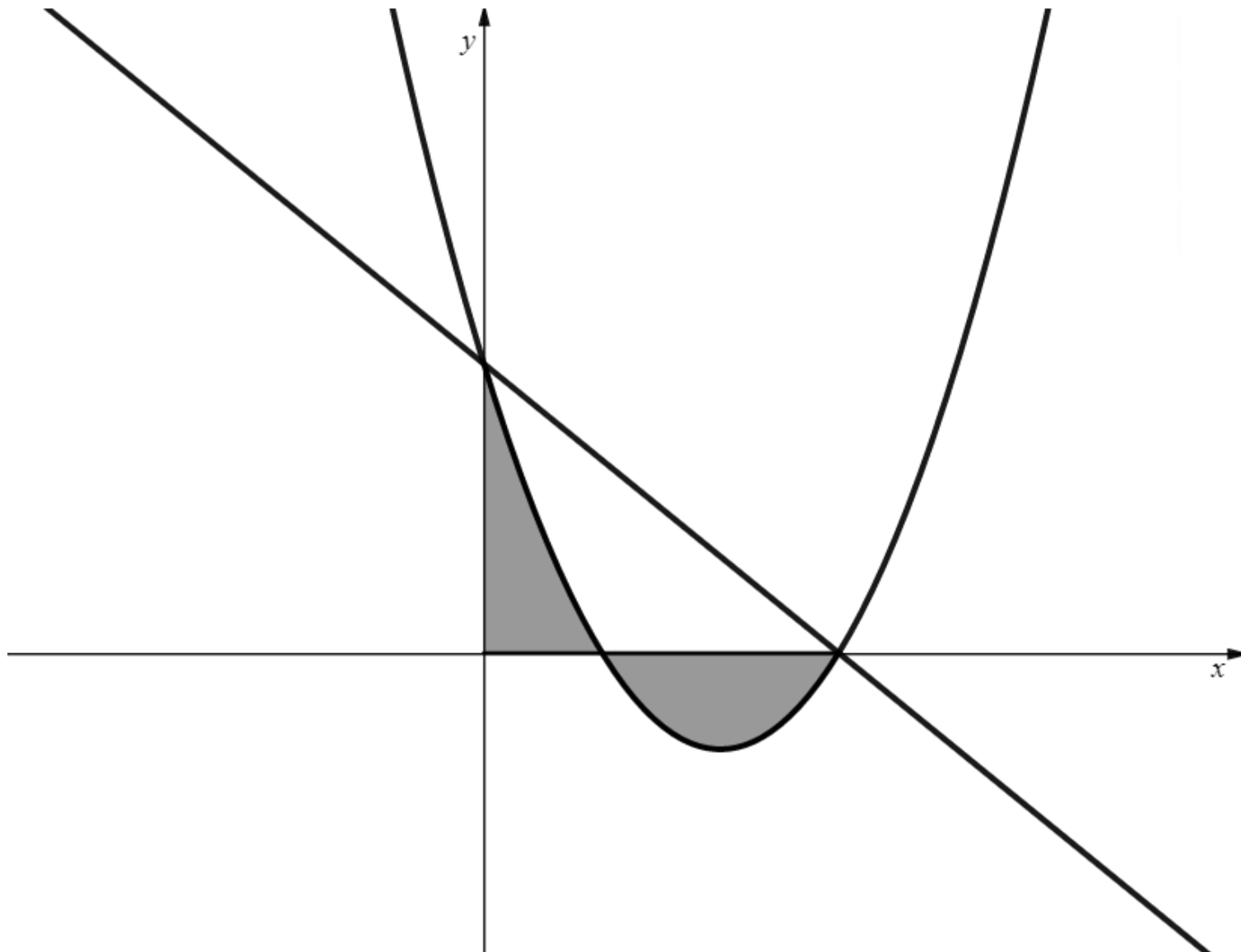


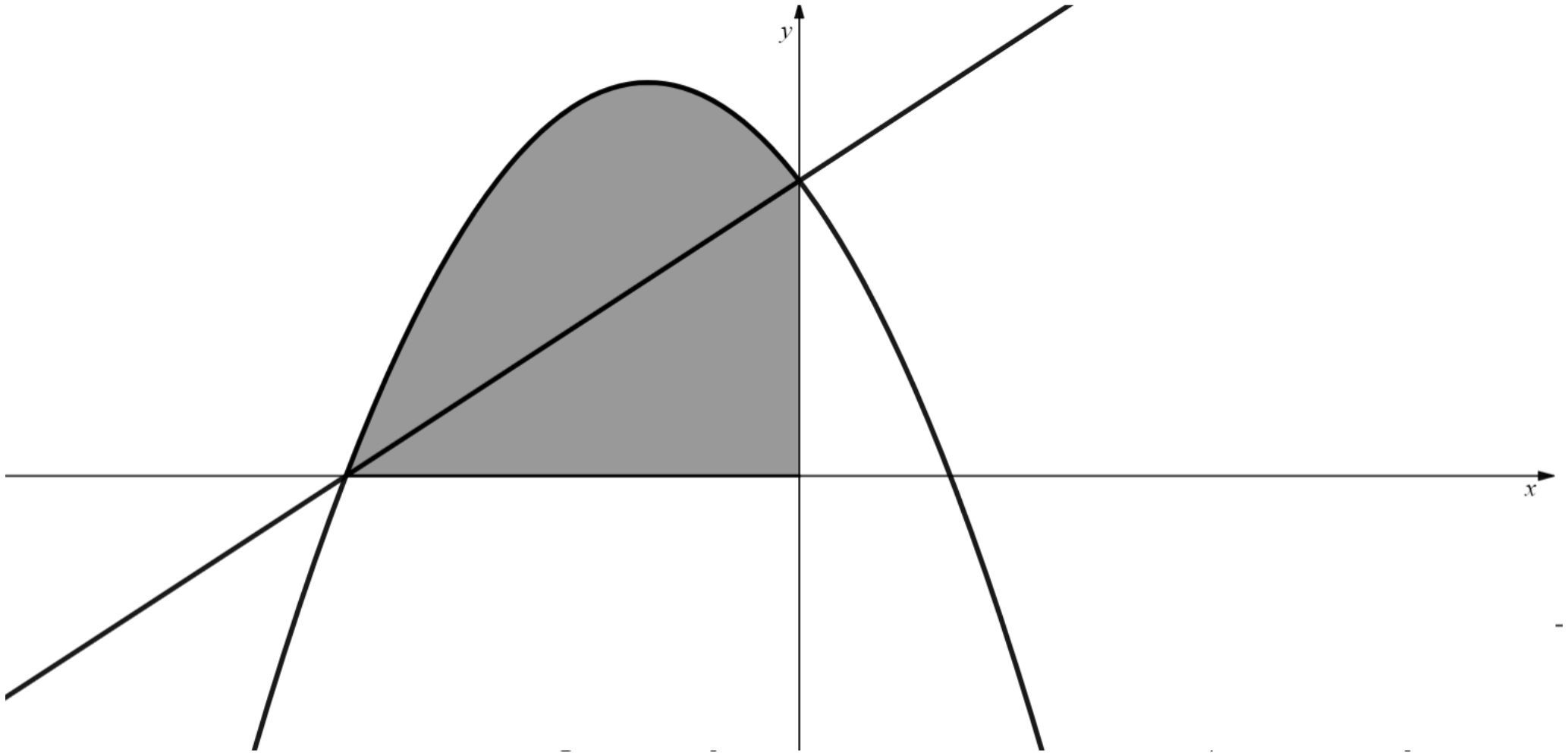
Suggest possible equations for the line and the parabola.

Justify your answer.

Generalise your answer.



Find equations for the line and the parabola such that the two shaded regions have the same area.



Find equations for the line and the parabola such that the two shaded regions have the same area.