

8.

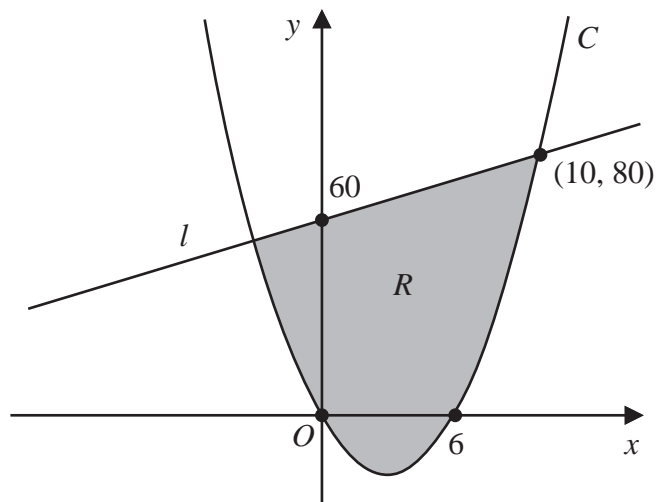


Figure 3

Figure 3 shows a sketch of a curve C and a straight line l .

Given that

- C has equation $y = f(x)$ where $f(x)$ is a quadratic expression in x
- C cuts the x -axis at 0 and 6
- l cuts the y -axis at 60 and intersects C at the point $(10, 80)$

use inequalities to define the region R shown shaded in Figure 3.