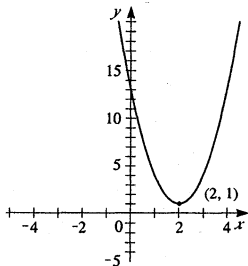


$$\begin{aligned}
 21. \quad g(x) &= 3x^2 - 12x + 13 = 3(x^2 - 4x) + 13 \\
 &= 3(x^2 - 4x + 4) + 13 - 12 = 3(x - 2)^2 + 1.
 \end{aligned}$$

Therefore, the minimum value is  $g(2) = 1$ .



$$\begin{aligned}
 23. \quad h(x) &= 1 - x - x^2 = -(x^2 + x) + 1 = -(x^2 + x + \frac{1}{4}) + 1 + \frac{1}{4} \\
 &= -(x + \frac{1}{2})^2 + \frac{5}{4}.
 \end{aligned}$$

Therefore, the maximum value is  $h(-\frac{1}{2}) = \frac{5}{4}$ .

