(1) Solve \( \frac{1}{x - 2} + \frac{3}{x + 3} = \frac{4}{x^2 + x - 6} \) and check your solutions.

(2) Solve \( x^4 + 5x^2 - 36 = 0 \) and check your solutions.

(3) Sketch a graph of \( f(x) = \begin{cases} 3x - 1 & x < 1 \\ 4 & -1 \leq x \leq 1 \\ x^2 & x > 1 \end{cases} \)

(4) Find the domain of the function \( f(x) = \frac{x - 5}{\sqrt{x^2 - 9}} \)

(5) Sketch a graph, in steps, of \( g(x) = -|x + 4| + 8 \).

(6) Given \( f(x) = x^2 + 1 \) and \( g(x) = \sqrt{x} \), find \( f \circ g \), \( g \circ f \) and \( f \circ f \).