(1) Find an equation for the line passing though the points $(-7, 4)$ and $(5, -12)$ in the plane.

(2) Sketch a graph of the following functions: $y = x$, $y = x^2$, $y = x^3$, $y = x^{-1}$, $y = x^{1/2}$, $y = x^{1/3}$

(3) Sketch a graph of $y = -2(x+3)^2 - 4$

(4) Sketch a graph of the function $f(x) = \begin{cases} x^2, & x < 2 \\ 6, & x = 2 \\ 10 - x, & x > 2 \text{ and } x \le 6 \end{cases}$

(5) Find the domain of $f(x) = \dfrac{2x + 1}{x^2 + x - 2}$

(6) Find the domain of $g(x) = \dfrac{\sqrt[3]{x}}{x^2 + 1}$

(7) Find the domain of $h(x) = \sqrt{4 - x} + \sqrt{x^2 - 1}$

(8) If $f(x) = x^2 + 2x + 1$ and $g(x) = 2x - 3$, find each of the following functions:
(a) $f \circ g$
(b) $g \circ f$
(c) $g \circ g \circ g$