Problem 1 (5 points). Let $f(x) = \sqrt{x} + 3 + 7$.

(a) Determine a formula for $f^{-1}(x)$.

(b) What is the range of $f(x)$?

(c) What is the domain of $f^{-1}(x)$?
Problem 2 (5 points). (a) Sketch the line $p(d) = 4d + 1$.

(b) Let $q(d) = -2d - 11$. Where do the lines $p(d)$ and $q(d)$ intersect? Write your answer as a coordinate pair.