Problem 1 (5 points). Let \( f(x) = \sqrt{x - 4} + 1 \).

(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 \( p(d) = \frac{1}{4}d - 2 \).

(b) Let \( q(d) = \frac{1}{2}d + 3 \). Where do the lines \( p(d) \) and \( q(d) \) intersect? Write your answer as a coordinate pair.