

(1)[5 points] Find the equation of the line through $(-2, 4)$ and perpendicular to $3x + y - 5 = 0$.

(2)[5 points] Find the points of intersection of the graphs of the linear functions $f(x) = 4x + 7$ and $g(x) = \frac{1}{3}x + \frac{10}{3}$.

(3)[5 points] Put $f(x) = 4x^2 - 4x - 1$ into standard form, give the vertex and axis of symmetry, and sketch the graph of the function.