Quiz 1

1. (5 points). Solve the equation $(z^2-6)-6(z^2-6)^{-1}=1$ for z.

2. (5 points). Simplify $\frac{x^2}{x+1} + \frac{x}{x+2} + \frac{x}{x^2+3x+2}$. For which x is this defined?

3. (5 points). At which points (x, y) do the lines 3x + 2y = 11 and 2x + 3y = 9 intersect?