Quiz   **Name**

1. The real number 4.5$\underline{783}$783... (with 783 repeating in its decimal expansion) is a rational number. Express it as a quotient of two positive integers.

2. Complete the square for the quadratic polynomial $x^2 + 3x - 1$. What is the smallest value the polynomial can have? For what value (or values) of x does the polynomial take its smallest value?

3. Factor completely the cubic polynomial $x^3 - 19x + 30$ and the quartic polynomial $x^4 + 4$. (The last polynomial can only have quadratic factors. To find them consider $(x^2 + 2)^2 - 4x^2$.)