7B Polynomial Division

1. Divide $x^3 + 2x^2 - 17x + 6$ by $(x - 3)$

2. Given that $f(x) = 4x^4 - 17x^2 + 4$, write $f(x)$ in the form:

$f(x) = (2x + 1)(ax^3 + bx^2 + cx + d)$

3. Find the remainder when $2x^3 - 5x^2 - 16x + 10$ is divided by $(x - 4)$