1. List all the zeros of the function \( f(x) = (x + 2)(x - 1)(2x - 5) \)

2. Use synthetic division to divide: 
\[
\frac{x^3 - 3x^2 - 8x - 1}{x + 2}
\]

3. Using your answer above, if \( f(x) = x^3 - 3x^2 - 8x - 1 \), then \( f(-2) = \)

4. Let \( f(x) = x^3 + 2x^2 - 5x - 6 \). Check that \( f(2) = 0 \), then using synthetic division factor \( f \) into linear factors.