Perform the following two divisions. Then answer Question 3.

1.
$$\frac{(x^2+5)(x-3)(x+4)}{(x^2+5)(x+4)}$$

2.
$$x^2 + x - 2 \overline{)3x^3 + 4x^2 - 5x + 2}$$

3. Write your results from Problem 2 in the form p = qd + r