1) The GCF and LCM of two polynomials are \( m - 7 \) and \( m^3 - 10m^2 + 11m + 70 \) respectively. If one of the polynomials is \( m^2 - 5m - 14 \), find the other polynomial.

2) The LCM and GCF of two polynomials are \( 10q^4 + 5q^3 + 8q^2 + 4q \) and \( 5q^2 + 4 \) respectively. Determine the other polynomial, if one of the polynomials is \( 5q^3 + 4q \).

3) The GCF and LCM of \( p(a) \) and \( q(a) \) are 1 and \( 2a^3 - 50a \) respectively. If \( p(a) \) is \( 2a^2 + 10a \), find \( q(a) \).

4) The LCM and GCF of \( g(x) \) and \( f(x) \) are \( x^5 - 2x^4 + 2x^2 - x \) and \( x \) respectively. Determine \( f(x) \), if \( g(x) \) is \( x^4 - 3x^3 + 3x^2 - x \).

5) The GCF and LCM of two polynomials are \( b^3 - 6b^2 + b - 6 \) and \( b^5 - b^4 - 35b^3 + 35b^2 - 36b + 36 \) respectively. Find the other polynomial, if one of the polynomials is \( b^4 - 7b^3 + 7b^2 - 7b + 6 \).
1) The GCF and LCM of two polynomials are \( m - 7 \) and \( m^3 - 10m^2 + 11m + 70 \) respectively. If one of the polynomials is \( m^2 - 5m - 14 \), find the other polynomial.

\[ m^2 - 12m + 35 \]

2) The LCM and GCF of two polynomials are \( 10q^4 + 5q^3 + 8q^2 + 4q \) and \( 5q^2 + 4 \) respectively. Determine the other polynomial, if one of the polynomials is \( 5q^3 + 4q \).

\[ 10q^3 + 5q^2 + 8q + 4 \]

3) The GCF and LCM of \( p(a) \) and \( q(a) \) are 1 and \( 2a^3 - 50a \) respectively. If \( p(a) \) is \( 2a^2 + 10a \), find \( q(a) \).

\[ a - 5 \]

4) The LCM and GCF of \( g(x) \) and \( f(x) \) are \( x^5 - 2x^4 + 2x^3 - x \) and \( x \) respectively. Determine \( f(x) \), if \( g(x) \) is \( x^4 - 3x^3 + 3x^2 - x \).

\[ x^2 + x \]

5) The GCF and LCM of two polynomials are \( b^3 - 6b^2 + b - 6 \) and \( b^5 - b^4 - 35b^3 + 35b^2 - 36b + 36 \) respectively. Find the other polynomial, if one of the polynomials is \( b^4 - 7b^3 + 7b^2 - 7b + 6 \).

\[ b^4 - 35b^2 - 36 \]