You may have added f and g instead of subtracting them. Set up the problem as follows:

$$\left(\frac{f-g}{h}\right)(x) = \frac{f(x) - g(x)}{h(x)} = \frac{10x^3 - 15x^2 - 5 - \left(-10x^3 - 10x - 5\right)}{5x}$$

Be careful to distribute the minus sign to all terms in g. Combine like terms, factor the numerator, and simplify.