Quiz 1

Add and subtract the given polynomials. When subtracting, subtract the second polynomial from the first (ask me if you have questions).

1. $x^2 + 3x + 2$ and $x + 7$

2. $x^3 + x + 15$ and $x^2 - 7x + 8$

3. $x + 3$ and $x^2 - 3x - 4$

Multiply the polynomials using the method you choose. Try to use at least two methods.

4. $3x + 4$ and $4x - 7$

5. $5x^2 + 5$ and $2x + 7$

6. $2 - x$ and $4x + 8$

Solutions

1. $x^2 + 3x + 2 + (x + 7) = x^2 + 4x + 9$

   $x^2 + 3x + 2 - (x + 7) = x^2 + 2x - 5$

2. $x^3 + x + 15 + (x^2 - 7x + 8) = x^3 + x^2 - 6x + 23$

   $x^3 + x + 15 - (x^2 - 7x + 8) = x^3 - x^2 + 8x - 8$

3. $x + 3 + (x^2 - 3x - 4) = x^2 - 2x - 1$

   $x + 3 - (x^2 - 3x - 4) = -x^2 + 4x + 7$

4. $(3x + 4)(4x - 7) = 12x^2 - 13x - 28$

5. $(5x^2 + 5)(2x + 7) = 10x^3 + 35x^2 + 10x + 35$

6. $(2 - x)(4x + 8) = -4x^2 + 16$