Arithmetic Operations with Polynomial Expressions Worksheet:

1) Perform the indicated operations and simplify. Show all your work.
$$(3x+4)(2x-5)$$

2) Perform the indicated operations and simplify. Show all your work.
$$5x(3x-1)(2x+3)$$

3) Perform the indicated operations and simplify. Show all your work.
$$(3x+5)^2$$

4) Perform the indicated operations and simplify. Show all your work.
$$(x-1)(x^2+x+1)$$

5) Perform the indicated operations and simplify. Show all your work.
$$\frac{12x^3+26x^2-8x}{2x}$$

6) Use Long Division to divide the polynomials. Show all your work.
$$\frac{6x^2-8x+13}{3x+2}$$ No credit unless long division is shown.