

Complete as many of the following problems as you can. You do not have to go in order. You can use a calculator to check your work but not to solve the problems.

If **your entire table** finishes early, you may leave early.

(1) Factor out the greatest common factor of the following polynomials:

(a) $7x + 14$

(c) $9x^4 - 3x^3 + 11x^2$

(b) $-24x^2 + 18x$

(d) $3x^2y + 6x^2y^2 + 3xy$

(2) Factor the following polynomials by grouping.

(a) $x(x + 9) + 1(x + 9)$

(c) $x^2 + 4x - 5x - 20$

(b) $x^3 - 3x^2 + 4x - 12$

(d) $-2x^3 + 10x^2 + 4x - 20$