

Name: \_\_\_\_\_

Complete as many of the following problems as you can with your table. If your entire table finishes early, you may leave early or work on homework.

(1) Factor the following polynomials completely:

(a)  $2x^2 + 5x + 2$

(c)  $6x^2 - 5x - 4$

(b)  $3x^2 - 8x - 28$

(d)  $9x^2 + 6x - 8$

(2) Factor the following polynomials completely:

(a)  $6x^3 - 6x$

(d)  $8x^3 + 1$

(b)  $9x^2 - 4$

(c)  $48y^4 - 3y^2$

(e)  $27x^3 - 8$

(3) (Challenge problems) Factor the following polynomials completely:

(a)  $z^4 - 1$

(b)  $10x^2(x + 1) - 7x(x + 1) - 6(x + 1)$

(c)  $y^7 + y$

(d)  $x^4 - 5x^2y^2 + 4y^4$

(e)  $(x - y)^4 - 4(x - y)^2$