NAME: Solutions Number Correct: _____

Factoring Quiz #4

Write each of the following expressions in factored form.

$t^2 - 4$

$= (t - 2)(t + 2)$

$b^4 - 81$

$= (b^2 - 9)(b^2 + 9)$

$= (b - 3)(b + 3)(b^2 + 9)$

$3r^2 - 12$

$= 3(r^2 - 4)$

$= 3(r - 2)(r + 2)$

$x^2 - 2x - 3$

$= (x - 3)(x + 1)$

$-3 \cdot 1 = -3$, $-3 + 1 = -2$

$n^2 + 7n + 10$

$= (n + 5)(n + 2)$

$x^2 - 4x + 3$

$= (x - 3)(x - 1)$

$w^2 - 5w - 6$

$(w - 6)(w + 1)$

$x^2 - 5x - 14$

$(x - 7)(x + 2)$

$9x^3y + 3xy^2 + 15xy$

$= 3xy(3x^2 + y + 5)$

$72r^2 - 50$

$= 2(36r^2 - 25)$

$= 2(6r - 5)(6r + 5)$

$14t^3 - 6t$

$2t(7t^2 - 3)$

$9 - x^2$

$= (3 - x)(3 + x)$

$9x^2 + 16x + 25$

dne.

$x^2 + 3x - 18$

$= (x + 6)(x - 3)$

$-3x^2 + 9x + 84$

$= -3(x^2 - 3x - 28)$

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

$n^2 - 9n + 20$

$= (n - 4)(n - 5)$