

NAME: Sams

Number Correct: _____

Factoring 'Speed Quiz' #2

Write each of the following expressions in factored form.

$p^2 - 49$

$$= (p-7)(p+7)$$

$a^2 + 10a + 24$

$$= (a+6)(a+4)$$

$75 - 5x^2$

$$= 5(x^2 - 15)$$

$$= 5(x - \sqrt{15})(x + \sqrt{15})$$

$x^2 - 9x + 18$

$$(x-6)(x-3)$$

$x^2 - 9$

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

$a^2 + 2a + 1$

$$= (a+1)^2$$

$16x^6 + 25$

d.n.f.

$a^2 - 64b^4$

$$= (a-8b^2)(a+8b^2)$$

$x^2 - 5x - 14$

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

$13x^2y^3z^2 - 7x^2y^5z$

$$= x^2y^3z(13z - 7y^2)$$

$$4x^2 - 48 = 4(x^2 - 12) = 4(x-4)(x+4)$$

$$= 4(x^2 - 12)$$

$m^2 + 12m + 30$

$$(m+?) (m+?) \text{ d.n.f.}$$

$w^2 - 2w - 48$

$$= (w-8)(w+6)$$

$4x^2 - 48x$

$$= 4x(x-12)$$

$2s^3t^2 - 8s^2t^3 - st$

$$= st(2s^2t - 8st^2 - 1)$$

$n^2 + 7n + 10$

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