



Name: _____

Factoring Assessment*Show your work.*

1. Factor fully. [marks:2,2,2,3,3,2,2]

a) $x^2 + x - 12$

b) $4x^2 + 7x - 15$

c) $4x(x - 2) + y(x - 2)$

d) $2xm^2 - 12xm - 54x$

e) $6x^2 - 21xy + 8xz - 28yz$

f) $36x^2 - 4$

g) $3x^2 + 8xy - 3y^2$

Keys: Patterns used to factor the above Polynomials.

1.
 - a) Sum and Product Trinomial Pattern.
 - b) Tricky Trinomials Pattern.
 - c) Common Factoring Pattern.
 - d) Common Factor First.
Sum and Product Trinomial Pattern Second.
 - e) Group Factoring Pattern.
 - f) Difference of Squares Pattern.
 - g) Tricky Trinomial Pattern.

2.
 - a) $(x+4)(x-3)$
 - b) $(4x-5)(x+3)$
 - c) $(x-2)(4x+y)$
 - d) $2x(m-9)(m+3)$
 - e) $(2x-7y)(3x+4z)$
 - f) $(6x-2)(6x+2)$
 - g) $(3x-y)(x+3y)$