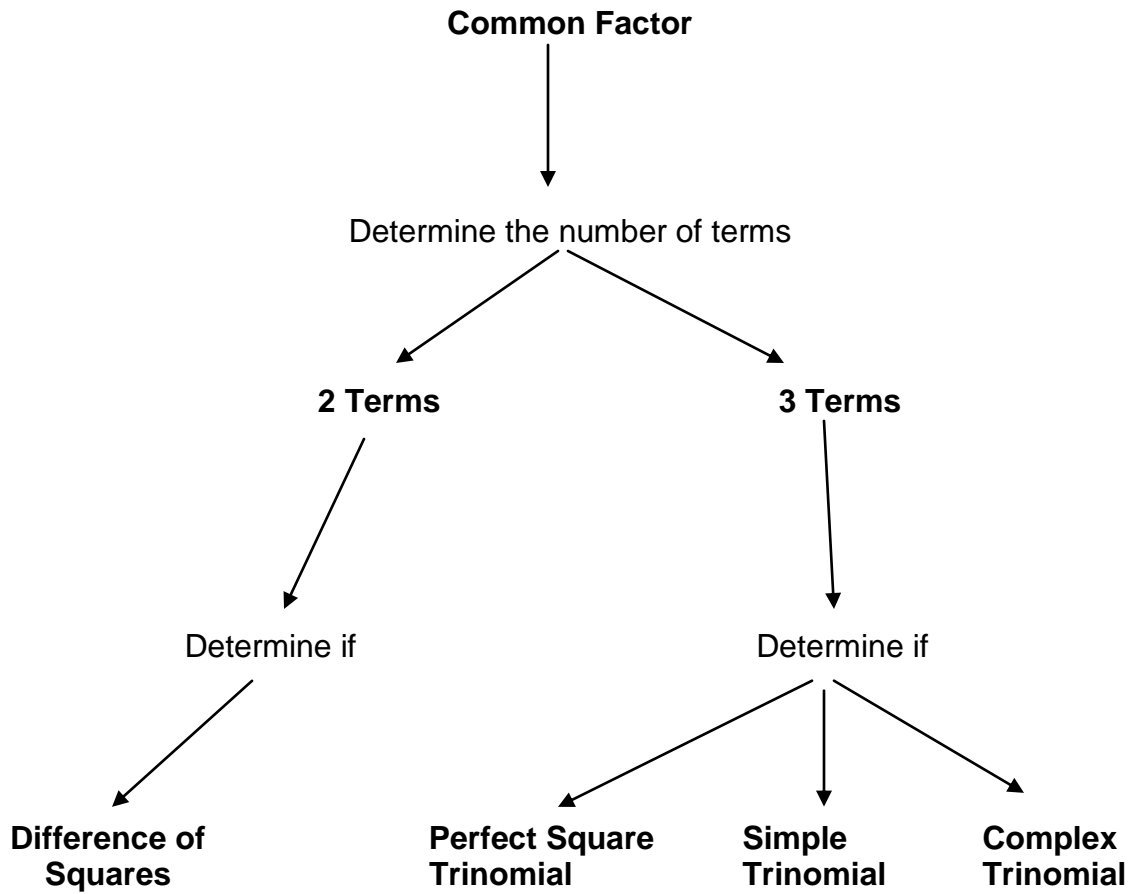


## Factor Fully

When you are asked to **factor fully**, you should consider the following :



## Factoring Worksheet

Factor each of the following **FULLY** !! Remember to look for common factors first.

a)  $30x^2y - 20x^2y^2 + 10x^3y^2$

b)  $n^2 - 4n - 45$

c)  $x^2 - xy - 20y^2$

d)  $4x^2 - 7x + 3$

e)  $6r^2 - 31r + 5$

f)  $4a^2 - 9b^2$

g)  $8a^2 - 72$

h)  $125x^2y^2 - 180y^2$

i)  $(2c - 5)^2 - 121$

j)  $6a^2b^3c - 15a^2b^2c^2$

k)  $k^4 - 9k^2 - 90$

l)  $p^2 - 19pq - 120q^2$

m)  $150 - 6n^2$

n)  $1 - 16s^4$

o)  $12t^2 - 15t - 18$

p)  $21n^2 + 8n - 4$

q)  $x^4 - 29x^2y^2 + 100y^4$

r)  $36x^4 + 120x^2y^2 + 100y^4$

s)  $72a^2 - 98b^4$

t)  $32w^3 - 160w^2 + 200w$

### Answers :

a)  $10x^2y(3 - 2y + xy)$

b)  $(n - 9)(n + 5)$

c)  $(x - 5y)(x + 4y)$

d)  $(4x - 3)(x - 1)$

e)  $(6r - 1)(r - 5)$

f)  $(2a - 3b)(2a + 3b)$

g)  $8(a + 3)(a - 3)$

h)  $5y^2(5x - 6)(5x + 6)$

i)  $(2c + 6)(2c - 16)$

j)  $3a^2b^2c(2b - 5c)$

k)  $(k^2 - 15)(k^2 + 6)$

l)  $(p - 24q)(p + 5q)$

m)  $6(5 - n)(5 + n)$

n)  $(1 + 2s)(1 - 2s)(1 + 4s^2)$

o)  $3(4t + 3)(t - 2)$

p)  $(7n - 2)(3n + 2)$

q)  $(x + 5y)(x - 5y)(x + 2y)(x - 5y)$

r)  $4(3x^2 + 5y^2)^2$

s)  $2(6a - 7b^2)(6a + 7b^2)$

t)  $8w(2w - 5)^2$