

Decode the Joke

Factorising with Common Factors

Factorise fully the expression for each of the letters of the alphabet.

A	$4x + 12y$	
B	$4x + xy$	
C	$4x - 3xy$	
D	$4x - 12xy$	
E	$x^2 + 3xy$	
F	$4x^2 + 4xy$	
G	$4xy - 12$	
H	$3xy - 12y^2$	
I	$4x^2 + 12xy$	
J	$12x^2 + 4y$	
K	$12x^2 - 2xy$	
L	$12xy - x^2y$	
M	$12x - 18xy^2$	

N	$6xy + 8y$	
O	$6x + 9xy$	
P	$6xy - 3x^2$	
Q	$8xy - 12x^2y$	
R	$6x^2 + 8x^2y$	
S	$6x^2y + 8xy$	
T	$12xy^2 - 6y^2$	
U	$12x^2y - 9xy$	
V	$8x^2y + 3x^2y^2$	
W	$12x^3y + 18x^2y$	
X	$12x^3 - 8x^2y^2$	
Y	$12xy - 12x^3y$	
Z	$6x^3y^2 - 12xy^3$	

Now decode the joke....

$6x^2y(2x + 3)$	$3y(x - 4y)$	$3x(2 + 3y)$		$4x(x + 3y)$	$2y(3x + 4)$	$x^2y(8 + 3y)$	$x(x + 3y)$

$2y(3x + 4)$	$6y^2(2x - 1)$	$x(x + 3y)$	$4x(1 - 3y)$		$4(x + 3y)$	$xy(12 - x)$	$4(xy - 3)$

$x(x + 3y)$	$x(4 + y)$	$2x^2(3 + 4y)$	$4(x + 3y)$	?	$4(x + 3y)$	$2y(3x + 4)$

$4x^2(3x - 2y^2)$	-	$3x(2y - x)$	$x(x + 3y)$	$2x^2(3 + 4y)$	$6y^2(2x - 1)$	!