

Factoring Perfect Squares and a Difference of Squares



Level 1 - Factor simple perfect squares and simple difference of squares

Level 2 - Factor more complex expressions where a GCF may be present

Level 3 - Factor complex expressions which may include two or more variables

Answers:

Level 1

a) $(x - 2)(x + 2)$	b) $(x - 3)(x + 3)$	c) $(x - 10)(x + 10)$
d) $(x - 8)(x + 8)$	e) $(x - 13)(x + 13)$	f) $(x - 5)(x + 5)$
g) $(7 - x)(7 + x)$	h) $(x - 1)(x + 1)$	i) $(x - y)(x + y)$
j) $(x + 1)^2$	k) $(x - 3)^2$	l) $(x + 5)^2$
m) $(x - 2)^2$	n) $(x - 4)^2$	o) $(x + 3)^2$
p) $(x + 4)^2$	q) $(x - 5)^2$	r) $(x - 6)^2$

Level 2

a) $4(x - 4)(x + 4)$	b) $2(x - 6)(x + 6)$	c) $9(x - 1)(x + 1)$
d) $5(x - 3)(x + 3)$	e) $(7x - 5)(7x + 5)$	f) $2(x - 2)(x + 2)$
g) $3(x - 5)(x + 5)$	h) $-3(x - 4)(x + 4)$	i) $(3x - 1)(3x + 1)$
j) $-2(x - 1)(x + 1)$	k) $(6x - 11)(6x + 11)$	l) $x(x - 2)(x + 2)$
m) $3(x + 3)^2$	n) $2(x - 1)^2$	o) $3(x + 5)^2$
p) $(3x - 5)^2$	q) $(5x - 4)^2$	r) $4(5x - 1)^2$

Level 3

a) $(3x - 4y)(3x + 4y)$	b) $(5 - 3x)(5 + 3x)$
c) $7(x - 2y^2)(x + 2y^2)$	d) $(x + 3y)^2$
e) $4z(x - 3y)(x + 3y)$	f) $(2x + 3y)^2$