

# Expansion of brackets

Q1. Expand the single brackets.

a)  $2x(3x+4)$

= \_\_\_\_\_

b)  $9x(x-3y^2)$

= \_\_\_\_\_

c)  $-3x^2y(5x-2y)$

= \_\_\_\_\_

d)  $13xy^2(x^2+y)$

= \_\_\_\_\_

e)  $-4xy(x^2-3y)$

= \_\_\_\_\_

f)  $14pq(3p^2-2q)$

= \_\_\_\_\_

g)  $3mn^2(m-7n)$

= \_\_\_\_\_

h)  $-5p^3(3p^5 - 5q^2)$

= \_\_\_\_\_

i)  $-4x^3y(2xy^2+3xy^2)$

= \_\_\_\_\_

j)  $-7x^2y^2(2x^3y^2+5y^3)$

= \_\_\_\_\_

Q2. Expand the following brackets

a)  $(2x-1)(3x+2)$

= \_\_\_\_\_

b)  $(4x-1)(5x+3)$

= \_\_\_\_\_

c)  $(3x+1)(4x+7)$

= \_\_\_\_\_

d)  $(x-2y)(2x+1)$

= \_\_\_\_\_

e)  $(2x+3)(3x+5)$

= \_\_\_\_\_

f)  $(3p+7q)(5p+9)$

= \_\_\_\_\_

g)  $(3x+2y)(5x-3y)$

= \_\_\_\_\_

h)  $(7x-2y)(3x+5y)$

= \_\_\_\_\_

i)  $(x-2y)(x^2-5y)$

= \_\_\_\_\_

j)  $(2x^2-5y^3)(3x-8y^2)$

= \_\_\_\_\_

Q3. Expand the followings square of algebraic expression.

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

= \_\_\_\_\_

b)  $(5x + 2)^2$

= \_\_\_\_\_

c)  $(5x + 3)^2$

= \_\_\_\_\_

d)  $(x + 2y)^2$

= \_\_\_\_\_

e)  $(3x + y)^2$

= \_\_\_\_\_

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

= \_\_\_\_\_

g)  $(x + 3y)^2$

= \_\_\_\_\_

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

= \_\_\_\_\_

i)  $(4x + 5y)^2$

= \_\_\_\_\_

j)  $(x - 1)^2$

= \_\_\_\_\_

k)  $(x - 2)^2$

= \_\_\_\_\_

l)  $(x - 3)^2$

= \_\_\_\_\_

m)  $(5x - 4)^2$

= \_\_\_\_\_

n)  $(3x - 5)^2$

= \_\_\_\_\_

o)  $(7x - 6)^2$

= \_\_\_\_\_

p)  $(x - 2y)^2$

= \_\_\_\_\_

q)  $(x - 3y)^2$

= \_\_\_\_\_

r)  $(2x - 3y)^2$

= \_\_\_\_\_

s)  $(5p - 4q)^2$

= \_\_\_\_\_

t)  $(6p - 7q)^2$

= \_\_\_\_\_

Q4. Expand the following brackets.

a)  $(3x+2y)(3x-2y)$

= \_\_\_\_\_

b)  $(7x+5y)(7x-5y)$

= \_\_\_\_\_

c)  $(3p+7q)(3p-7q)$

= \_\_\_\_\_

d)  $(4x+9y)(4x-9y)$

= \_\_\_\_\_