

1. Expand:

a)  $(x + 1)(x + 2) = x^2 + 3x + 2$

b)  $(x + 1)(x + 3) = x^2 + 4x + 3$

c)  $(x + 2)(x + 4) = x^2 + 6x + 8$

d)  $(x + 5)(x + 3) = x^2 + 8x + 15$

e)  $(x + 3)(x + 1) = x^2 + 4x + 3$

f)  $(x + 5)(x + 2) = x^2 + 7x + 10$

g)  $(x + 4)(x + 2) = x^2 + 6x + 8$

h)  $(x + 11)(x + 3) = x^2 + 14x + 33$

i)  $(x + 12)(x + 4) = x^2 + 16x + 48$

j)  $(x + 5)(x + 13) = x^2 + 18x + 65$

k)  $(x + 13)(x + 1) = x^2 + 14x + 13$

l)  $(x + 25)(x + 2) = x^2 + 27x + 50$

2. Expand:

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

b)  $(x + 1)(x - 3) = x^2 - 2x - 3$

c)  $(x - 2)(x + 4) = x^2 + 2x - 8$

d)  $(x - 5)(x + 3) = x^2 - 3x - 15$

e)  $(x - 3)(x - 1) = x^2 - 4x + 3$

f)  $(x - 5)(x - 2) = x^2 - 7x + 10$

g)  $(x + 4)(x - 2) = x^2 + 2x - 8$

h)  $(x + 11)(x - 3) = x^2 + 8x - 33$

i)  $(x - 12)(x + 4) = x^2 - 8x - 48$

j)  $(x - 15)(x + 3) = x^2 - 12x - 45$

k)  $(x - 13)(x - 1) = x^2 - 14x + 13$

l)  $(x - 25)(x - 2) = x^2 - 27x + 50$