

1. Factorise fully:

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

b)  $3x + 15 = 3(x + 5)$

c)  $6x + 2 = 2(3x + 1)$

d)  $12x + 15 = 3(4x + 5)$

e)  $6x - 2 = 2(3x - 1)$

f)  $12x - 15 = 3(4x - 5)$

g)  $4x + 4 = 4(x + 1)$

h)  $13x + 65 = 13(x + 5)$

i)  $36x + 132 = 12(3x + 11)$

j)  $56x + 15 = 3(14x + 5)$

k)  $36x - 12 = 12(3x - 1)$

l)  $32x - 40 = 8(4x - 5)$

2. Factorise fully:

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

b)  $3x^2 + 15x = 3x(x + 5)$

c)  $6x^2 + 2x = 2x(3x + 1)$

d)  $12x^2 + 15x = 3x(4x + 5)$

e)  $6x^3 - 2x^2x = 2x^2(3x - 1)$

f)  $12x^3 - 15x^2 = 3x^2(4x - 5)$

g)  $4x^2 + 4x = 4x(x + 1)$

h)  $13x^2 + 65x = 13x(x + 5)$

i)  $36x^2 + 132x = 12x(3x + 11)$

j)  $56x^2 + 15x = 3x(14x + 5)$

k)  $36x^2 - 12x = 12x(3x - 1)$

l)  $32x^2 - 40x = 8x(4x - 5)$

3. Factorise fully:

a)  $2x^2y + 2xy = 2xy(x + 1)$

b)  $3x^2z + 15xz = 3xz(x + 5)$

c)  $6x^2w + 2xw = 2xw(3x + 1)$

d)  $12x^2w + 15xw = 3xw(4x + 5)$

e)  $6x^3 - 2x^2v = 2x^2(3x - v)$

f)  $12x^3 - 15x^2f = 3x^2(4x - 5f)$

g)  $4x^2h + 4xh = 4xh(x + 1)$

h)  $13x^2q + 65xq = 13xq(x + 5)$

i)  $36x^2y + 132xy = 12xy(3x + 11)$

j)  $56x^2p + 15xp = 3xp(14x + 5)$

k)  $36x^2 - 60xt = 12x(3x - 5t)$

l)  $32x^2 - 24xu = 8x(4x - 3u)$