ANSWERS TO REVISION

Expansion:

1. 2(x + 3)

= 2x +6

1. –y(x + 8)

= -yx -8y

1. 5p (p +2) -3

= 5p2 +10p – 3

1. 2x (x + 7)

= 2x2 + 14x

1. (w + 6)(w +2)

= w2 + 2w + 6w +12

= w2 + 8w +12

1. (2n +1)(n+3)

= 2n x n + 2n x 3 +1 x n + 3

= 2n2 + 6n + n +3

= 2n2 + 7n +3

1. (x +5) (x +5)

= x2 +10x + 25

1. (3m – 2n) (3m + 2n)

= 3m x 3m + 3m x 2n +3m x ( -2n) +(-2n) x 2n

= 9m2 -4n2

1. (6 + x)(7- x)

= 42 -6x +7x –x2

= 42+x- x2

1. (kg + h)2

= (kg + h) (kg + h)

= k2g2 +2kgh +h2

1. (6 – p )(6 +p)

= 36 +6p -6p –p2

= 36 – p2

1. 4(2x – 3) +5(x +1)

= 8x -12 + 5x +5

=13x -7

1. (x – 3)2

= (x – 3) (x – 3)

= x2 -3x -3x +9

= x2 - 6x +9

1. (4y +3)(7-2y)

= 4y x 7 + 4y x -2y + 3x7 + 3 x -2y

= 28y -8y2 +21 - 6y

=22y - 8y2 +21

1. (9 + y)(9-y)

= 81 – y2

1. -2w(w-4)

= -2w2 + 8w

1. 6x(x+2) +5(x+2)

= 6x2 +12x +5x +10

= 6x2 +17x +10

1. (x +6)(x-6)

= x2 – 36

1. (x+4)(x+3)

= x2 +7x +12

1. (x +3)2

= x2 + 6x +9

Factorising:

1 a. 6x +3

HCF = 3

= 6x +3

3 3

= 3(2x +1)

b. 2x –x2

HCF = x

= 2x –x2

x x

= x(2 –x)

2 a. (x+2)(x+1)

b. (x+2)(x+9)

c. (x-12)(x+2)

d. (x-2)2

e. (x-2)(x-9)

f. (x-2)(x-6)

g. (x-4)2

h. (x+6)(x-5)

1. (x+3)(x-1)

j. (x-8)(x-1)

k. (x+9)(x-4)

l. (x+y)2

m. (x+1)(x-2)