GCSE Higher Unit 1-4 Extra Work

1. Expand & Simplify

(a) $(w + 4)(w + 2)$ (b) $(a + 5)(a - 3)$ (c) $(b - 3)(b + 7)$

(d) $(8 + x)(2 + x)$ (e) $(4 - w)(w + 2)$ (f) $(x + 2)(8 - x)$

2. Expand & Simplify

a) $(x + 4)(x + 2) + (x + 1)(x + 3)$ b) $(2x + 4)(x - 3) + (x + 5)(x - 2)$

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

3. Factorise

a) $x^2 + 10x + 21$ c) $x^2 - 6x - 27$ e) $x^2 + x - 42$

b) $x^2 + 2x - 48$ d) $x^2 - 9x + 20$ f) $x^2 - x - 12$

4. Circle the correct answer in each row

0.3^2	0.9	0.09	0.009
0.2^4	0.0016	0.16	0.016
0.1^5	0.000001	0.00001	0.0001
0.9^2	8.1	0.18	0.81
1.2^2	1.44	0.144	14.4
$(-0.1)^3$	-0.0001	-0.001	0.001