



SPTA

N5 Homework

Brackets/Factors1 (A)



Show all working – NO calculator required.

Marks

Expand and Simplify each of the following expressions:

- | | | | |
|--------------------------------|----------------------------|------------------------|------|
| 1. a) $p(9 - 2p)$ | (b) $-3u(5p - 7u)$ | (c) $3(x + 7) + 2x$ | |
| d) $16y - 5(2y + 3)$ | (e) $x(x^3 + 2)$ | (f) $2y^2(w - 5y)$ | (6) |
| 2. a) $9(a + 5) + 7(2a + 7)$ | (b) $7(y - 8) - 5(3y - 6)$ | | (6) |
| 3. a) $(x + 4)(x + 7)$ | (b) $(y - 9)(y - 3)$ | (c) $(s + 12)(s - 2)$ | |
| d) $(4x - 3)^2$ | (e) $(3w - 8)(2w + 1)$ | (f) $(x + 1)(x^2 + 1)$ | (12) |
| 4. a) $(x - 2)(2x^2 - 3x - 2)$ | (b) $(2x + 7)^3$ | | (6) |

Factorise each of the following expressions:

- | | | | |
|-------------------|-------------------|------------------------|------|
| 5. a) $9 - 3p$ | (b) $15pq - 75pu$ | (c) $6xy + 14y + 2xyz$ | |
| d) $8y^3 + 12y^7$ | (e) $6x^3 + 8x$ | | (10) |

Total Marks: 40