

Q1. Factorise each of the following fully using common factors :

(a) $3x + 6$

(b) $16a - 12b$

(c) $x^2 + 3x$

(d) $6mn + 8mp - 4mq$

Q2. Factorise each of the following differences of squares :

(a) $x^2 - y^2$

(b) $9a^2 - b^2$

(c) $25p^2 - 4q^2$

(d) $1 - 16x^4$

Q3. Factorise each of the following quadratic expressions :

(a) $r^2 + 6r + 8$

(b) $q^2 - 4q + 4$

(c) $w^2 - w - 6$

(d) $m^2 + m - 12$

(e) $2k^2 + 3k + 1$

(f) $24x^2 + 2x - 1$

(g) $1 - h - 2h^2$

(h) $9a^2 + 6a - 8$

Q4. Fully factorise each of these expressions. There is a mixture of types.

(a) $4a^2b - 8ab^2$

(b) $6x - 24x^3$

(c) $4b^2 + 14b - 8$

(d) $1 - x^4$