

$$(d) xy + 2ay + 3ax + 6a^2$$

[2]

Q3. Factorise each of the following:

$$(a) k^2 - 81$$

[1]

$$(b) x^2 - 16$$

[1]

$$(c) 25m^2 - 49$$

[1]

Q4. Factorise the following completely:

$$(a) 2x^2 - 18$$

[2]

$$(b) 2p^2 - 50$$

[2]

$$(c) 8m^2 - 32n^2$$

[2]

Q5. Factorise the following:

(a) $x^2 + x - 6$ [2]

(b) $x^2 - x - 6$ [2]

(c) $2x^2 + 7x + 3$ [2]

(d) $5x^2 + x - 4$ [2]

Q6. Factorise the following:

(a) $x^2 - xy - 2y^2$ [2]

(b) $4x^2 + 12xy + 9y^2$ [2]

(c) $35x^2y + 5xy - 30y$ [3]

Answers:

Q1 (a) $3x(x + 3)$ (b) $2y(x + 2z - 4xz)$ (c) $2r^2(3H - h)$

Q2 (a) $(x + y)(x - 3)$ (b) $(3x + 1)(2x + 4)$ (c) $(x - 1)(x^2 + 1)$

Q3 (a) $(k - 9)(k + 9)$ (b) $(x - 4)(x + 4)$ (c) $(5m - 7)(5m + 7)$

Q4 (a) $2(x - 3)(x + 3)$ (b) $2(p - 5)(p + 5)$ (c) $8(m - 2n)(m + 2n)$

Q5 (a) $(x + 3)(x - 2)$ (b) $(x - 3)(x + 2)$ (c) $(2x + 1)(x + 3)$ (d) $(5x - 4)(x + 1)$

Q6 (a) $(x - 2y)(x + y)$ (b) $(2x + 3y)^2$ (c) $5y(x + 1)(7x - 6)$