1.   (a) Factorise fully $2x^2 - 4xy$

....
(2)

(b) Factorise $p^2 - 6p + 8$

....
(2)

(c) Simplify $\dfrac{(x+2)^2}{x+2}$

....
(1)

(d) Factorise $x^2 - 100$

....
(2)

(7 marks)

---

2.   (a) Simplify $x^5 \times x^4$

....
(1)

(b) Simplify $y^7 \div y^2$

....
(1)

(c) Expand and simplify $3(2a + 5) + 5(a - 2)$

....
(2)

(d) Expand and simplify $(y + 5)(y + 7)$

....
(2)

(e) Factorise $p^2 - 6p + 5$

....
(2)

(8 marks)

3.   (a) Expand and simplify $(p + 9)(p - 4)$

....
(2)

(b) Factorise $x^2 - 11x + 18$

....
(2)

(c) Factorise $x^2 - 49$

....
(2)

(d) Simplify $(9x^8 y^3)^{\frac{1}{2}}$

....
(2)

(8 marks)

4.   (a) Expand $3(2y - 5)$

....
(1)

(b) Factorise completely $8x^2 + 4xy$

....
(2)

(c) Expand and simplify $(p + 7)(p - 8)$

....
(2)

(d) Factorise $x^2 - 169$

....
(2)

(7 marks)

5. (a) Expand $4(3x + 5)$

....
(1)

(b) Expand and simplify $3(x - 4) - 2(x + 5)$

....
(2)

(c) Expand and simplify $(x + 4)(x + 6)$

....
(2)

(5 marks)

6. (a) Factorise $x^2 + 7x$

....
(1)

(b) Factorise $y^2 - 10y + 16$

....
(2)

(c) Solve $y^2 - 10y + 16 = 0$

....
(2)

(5 marks)

7. (a) Expand and simplify $3(x + 4) + 2(5x - 1)$

....
(2)

(b) Expand and simplify $(2x + 1)(x - 4)$

....
(2)

(c) Factorise completely $6y^2 - 9xy$

....
(2)

(6 marks)

8. (*a*) Expand $x(x + 2)$

....
(2)

(*b*) Expand and simplify $(x + 3)(x - 4)$

....
(2)

(*c*) Factorise completely $2y^2 - 4y$

....
(2)

(*d*) Factorise $x^2 - 9$

....
(2)

(8 marks)

9. (a) Expand and simplify $(3x + 5)(4x - 1)$

....
(2)

(*b*) Factorise $x^2 - 3x - 10$

....
(2)

(c) Solve $x^2 - 3x - 10 = 0$

$x =$ ....
(2)

(6 marks)

10. (a) Expand $3(4x + y)$

(2)

....

(b) Expand $5p(p - 3)$

(1)

....

(c) Expand and simplify $(y + 8)(y - 3)$

(2)

....

(d) Expand and simplify $(2t - 3)^2$

(2)

....
(7 marks)

11. (a) Factorise fully $6y^2 + 12y$

(2)

....

(b) Factorise $k^2 + 13k + 30$

(2)

....

(c) Solve $k^2 + 13k + 30 = 0$

(2)

....

(6 marks)

12. (a) Factorise $5x - 10$

....

(1)

(b) Factorise fully $2p^2 - 4pq$

....

(2)

(c) Expand and simplify $(t + 5)(t - 4)$

....

(2)

(d) Factorise $x^2 + 17x + 60$

....

(2)

(*e*) Factorise $x^2 - 144$

....

(2)

(9 marks)

13. (a) Factorise $\qquad 8x - 20$

....
(1)

(b) Factorise fully $\qquad 10x^2 - 15xy$

....
(2)

(c) Factorise $\qquad x^2 - 64$

....
(2)

(d) Expand and simplify $\qquad (x + 7)(x - 5)$

....
(2)

(e) Factorise $\qquad x^2 + 2x - 15$

....
(2)

(f) Solve $\qquad x^2 + 2x - 15 = 0$

....
(2)
(11 marks)