

**EXERCISE 3D**

- |          |          |                                 |          |                              |          |                  |
|----------|----------|---------------------------------|----------|------------------------------|----------|------------------|
| <b>1</b> | <b>a</b> | $x(x - 5)$                      | <b>b</b> | $2x(x + 3)$                  | <b>c</b> | $2x(2 - y)$      |
|          | <b>d</b> | $3b(a - 2)$                     | <b>e</b> | $2x^2(1 + 4x)$               | <b>f</b> | $6x(2 - x)$      |
|          | <b>g</b> | $x^2(x + 1)$                    | <b>h</b> | $3ab(b - 3a)$                |          |                  |
| <b>2</b> | <b>a</b> | $(x + 5)(3 + x)$                | <b>b</b> | $(b + 3)(a - 5)$             | <b>c</b> | $(x + 4)(x + 1)$ |
|          | <b>d</b> | $(x + 2)(2x + 5)$               | <b>e</b> | $(c - d)(a + b)$             | <b>f</b> | $(2 + y)(y - 1)$ |
|          | <b>g</b> | $(x - 1)(ab + c)$               | <b>h</b> | $(x + 2)(a - 1)$             | <b>i</b> | $(x - 3)(x - 2)$ |
|          | <b>j</b> | $(x + 5)(x + 8)$                | <b>k</b> | $2x(x - 2)$                  |          |                  |
|          | <b>l</b> | $(x + y)(x + y + 1)(x + y - 1)$ |          |                              |          |                  |
| <b>3</b> | <b>a</b> | $(x + 4)(x - 4)$                | <b>b</b> | $(8 + x)(8 - x)$             |          |                  |
|          | <b>c</b> | $(3x + 1)(3x - 1)$              | <b>d</b> | $(7 + 2x)(7 - 2x)$           |          |                  |
|          | <b>e</b> | $(y + 2x)(y - 2x)$              | <b>f</b> | $(2a + 5b)(2a - 5b)$         |          |                  |
|          | <b>g</b> | $(9x + 4y)(9x - 4y)$            | <b>h</b> | $(2x^2 + y)(2x^2 - y)$       |          |                  |
|          | <b>i</b> | $(3ab + 4)(3ab - 4)$            | <b>j</b> | $(x + 5)(x + 1)$             |          |                  |
|          | <b>k</b> | $3(3x + 2)(x - 2)$              | <b>l</b> | $3(x - 3)(x - 1)$            |          |                  |
| <b>4</b> | <b>a</b> | $2(x + 2)(x - 2)$               | <b>b</b> | $3(y + 3)(y - 3)$            |          |                  |
|          | <b>c</b> | $2(1 + 3x)(1 - 3x)$             | <b>d</b> | $x(2 + 3x)(2 - 3x)$          |          |                  |
|          | <b>e</b> | $ab(a + b)(a - b)$              | <b>f</b> | $2(5 + xy)(5 - xy)$          |          |                  |
|          | <b>g</b> | $b(3b + 2)(3b - 2)$             | <b>h</b> | $x(x^2 + y^2)(x + y)(x - y)$ |          |                  |
| <b>5</b> | <b>a</b> | $(x + 2)^2$                     | <b>b</b> | $(x - 5)^2$                  | <b>c</b> | $(3x + 5)^2$     |
|          | <b>d</b> | $(2x + 7)^2$                    | <b>f</b> | $(x - 10)^2$                 | <b>g</b> | $(x - 4)^2$      |
| <b>6</b> | <b>a</b> | $-(3x - 1)^2$                   | <b>b</b> | $3(x + 3)^2$                 | <b>c</b> | $-2(3x - 1)^2$   |
|          | <b>d</b> | $2(x + 5)(x - 5)$               | <b>e</b> | $2(x - 4)^2$                 | <b>f</b> | $-3(x + 3)^2$    |