BASIC POLYNOMIALS

Write the expansion of the following.

1
$$(x+5)(x+1)$$

2
$$(x-2)(x-3)$$

3
$$(a-3)(a+4)$$

4
$$(x-2)^2$$

5
$$(y+7)^2$$

6
$$(2x+3)(x+5)$$

7
$$(3x-4)(x-2)$$

8
$$(3m+7)(2m-1)$$

9
$$(3x+2)(3x+2)$$

10
$$(2p-9)(2p+9)$$

11
$$(3x+2)(2x+3)$$

12
$$(4p-5)^2$$

19
$$(x^2+5)(x^2-2x-3)$$
 20 $(x-2)(x+2)(x+2)$ **21** $(x^2-y^2)^3$

20
$$(x-2)(x+2)(x+2)$$

21
$$(x^2 - y^2)^3$$

22 The correct expansion of $(\sqrt{x} + \sqrt{y})^2$ is: **A** $x^2 + 2xy + y^2$ **B** x + y + 2xy **C** $x + y + 2\sqrt{xy}$ **D** $x^2 + y^2 + 2\sqrt{xy}$

A
$$x^2 + 2xy + y^2$$

$$\mathsf{B} \quad x + y + 2xy$$

$$\mathbf{C} \quad x + y + 2\sqrt{xy}$$

D
$$x^2 + y^2 + 2\sqrt{xy}$$

23 Indicate whether each answer is a correct or incorrect factorisation of $x^2 - 4xy + 4y^2$.

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

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

(a)
$$(x+2y)^2$$
 (b) $(2y-x)^2$ (c) $(2x-y)^2$ (d) $(x-2y)^2$

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