Q1. (2019)

18 Here is an identity.

$$x^2 - y^2 \equiv (x + y)(x - y)$$

18(b)	$(10a + 9b)(10a - 9b)$ or $(9b + 10a)(10a - 9b)$	B1	either order
	Additional Guidance		
	Condone missing final bracket, eg $(10a + 9b)(10a - 9b$		B1
	Condone a multiplication sign eg $(10a + 9b) \times (10a - 9b)$		B1

Q2. (2020)

Q	Answer	Mark	Comments
28	$4(6 + x)(6 - x)$ or $-4(x + 6)(x - 6)$	B2	oe with full factorisation B1 $(12 + 2x)(12 - 2x)$ or $2(6 + x)(12 - 2x)$ or $(12 + 2x)2(6 - x)$ or $2(6 + x)2(6 - x)$ or $4(36 - x^2)$ oe
	Additional Guidance		
	$2(72 - 2x^2)$		B0
	Condone multiplication signs for B1 or B2 eg1 $4 \times (6 + x) \times (6 - x)$ eg2 $(12 + 2x) \times (12 - 2x)$ eg3 $(12 + 2 \times x) \times (12 - x \times 2)$		B2 B1 B1
	Condone missing final bracket eg1 $4(6 + x)(6 - x$ eg2 $(12 + 2x)(12 - 2x$		B2 B1
	Do not allow $x2$ for $2x$		
	Ignore attempts to solve $144 - 4x^2 = 0$		

Q3. (2021)

Question	Answer	Mark	Comments
15	$x^2 + 3ax + ax + 3a^2$ $(\equiv x^2 + bx + 75)$ or $x^2 + 4ax + 3a^2$ $(\equiv x^2 + bx + 75)$ or $3ax + ax + 3a^2 \equiv bx + 75$ or $4ax + 3a^2 \equiv bx + 75$ or $3a^2 = 75$	M1	
	$a = 5$ and/or $a = -5$	A1	implied by $(x + 5)(x + 15)$ or $(x - 5)(x - 15)$ implied by answer 20 and/or -20
	20 and -20	A1	oe ± 20

Q4. (2023)

Q	Answer	Mark	Comments
21	$(x - 3)^2 - 24$ or $a = 3$ and $b = 24$	B2	B1 $(x - 3)^2 \ldots$ or $(x - 3)(x - 3) \ldots$ or $a = 3$ (implied by 3, -24) or $x^2 - 2ax + a^2 - b$ or $-2a = -6$ or $2a = 6$ or $a^2 - b = -15$ or correct b for their a
	Additional Guidance		
	$(x + 3)^2 - 24$ (24 is correct for $a = -3$)		B1
	$(x - 6)^2 - 51$ (51 is correct for $a = 6$)		B1
	$(x + 6)^2 - 51$ (51 is correct for $a = -6$)		B1