

Q1. (2020)

Q	Answer	Mark	Comments
25	$(3x - 4)(x + 5)$	B2	oe product of brackets eg $(x + 5)(3x - 4)$ or $(3x - 4)(5 + x)$ or $-(4 - 3x)(x + 5)$ B1 $(3x + a)(x + b)$ where $ab = -20$ or $a + 3b = 11$ or $3x(x + 5) - 4(x + 5)$ or $x(3x - 4) + 5(3x - 4)$
	Additional Guidance		
	Ignore attempts to solve $3x^2 + 11x - 20 = 0$		
	$(3x + 4)(x - 5)$		B1
	$(3x + 4)(x + 5)$		B0
	$(3x - 1)(x + 4)$		B1
	$(3x + 1)(x - 4)$		B0
	Condone multiplication signs between brackets for B2 eg $(3x - 4) \times (x + 5)$		B2
	Condone multiplication signs between brackets for B1 eg $(3x - 1) \times (x + 20)$		B1
	Condone missing final bracket eg1 $(3x - 4)(x + 5$ eg2 $(3x - 20)(x + 1$		B2 B1
	Do not allow $x3$ for $3x$ etc		

Q2. (2022)

Q	Answer	Mark	Comments
23	$(3x + 2)(x - 6)$	B2	B1 $(3x + a)(x + b)$ where $ab = -12$ or $a + 3b = -16$ a and b must be integers SC1 $(-3x - 2)(6 - x)$
	Additional Guidance		
	Brackets in either order for B2 and B1 and SC1		
	$(3x + 6)(x - 2)$		B1
	$(3x + 4)(x - 3)$ or $(3x + 3)(x - 4)$ or $(3x - 3)(x + 4)$ or $(x + 3)(3x - 4)$		B1
	$(3x + 12)(x - 1)$ or $(x - 12)(3x + 1)$		B1
	Some B1 responses may be implied eg $3(x + 4)(x - 1)$ implies $(3x + 12)(x - 1)$		B1
	Do not allow answers involving fractions eg $3(x - 6)(x + \frac{2}{3})$		B0
	Some examples of B1 with $a + 3b = -16$ $(3x + 5)(x - 7)$ $(3x + 8)(x - 8)$ $(3x - 1)(x - 5)$ $(3x - 7)(x - 3)$		
	$(2 + 3x)$ is equivalent to $(3x + 2)$ etc		
	Condone use of multiplication signs in B2 or B1 responses eg $(3x + 2) \times (x - 6)$		B2
	Condone missing closing bracket in B2 or B1 responses eg $(3x + 6)(x - 2$		B1
	Ignore any attempt to 'solve' after B2 or B1 seen		

Q3. (2024)

Q	Answer	Mark	Comments
19(a)	One of $12x^2 + 8x$ $-12x^2 + 10x$ $-18x - 42$	M1	may be seen in a grid
	Two of $12x^2 + 8x$ $-12x^2 + 10x$ $-18x - 42$	M1dep	may be seen in a grid
	$12x^2 + 8x$ and $-12x^2 + 10x$ and $-18x - 42$ and -42	A1	must see 6 correct terms and a final simplification to -42
	Additional Guidance		
	For terms seen in a grid accept eg $8x$ for $+8x$		
	Accept multiplication signs between coefficients and algebra eg $12 \times x^2 + 8 \times x$		1st M1
	Accept eg $+12x^2$ for $-12x^2$		
	Do not accept unprocessed brackets eg do not accept $-(18x + 42)$		
	Crossed out terms are likely to be their working rather than deleted work		

Q4. (2024)

Q	Answer	Mark	Comments
19(b)	$(4x + 5)(2x - 7)$	B2	oe factorisation eg $(-2x + 7)(-4x - 5)$ B1 $(ax + b)(cx + d)$ where $ac = 8$ and $bd = -35$ or $(ax + b)(cx + d)$ where $ac = 8$ and $ad + bc = -18$ allow multiplication signs for B2 or B1
	Additional Guidance		
	B1 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	$(8x - 7)(x + 5)$ $(ac = 8 \text{ and } bd = -35)$		B1
	$(2x - 3)(4x - 3)$ $(ac = 8 \text{ and } ad + bc = -18)$		B1
	For B1 allow use of fractions or decimals eg $(4x + 10)(2x - 3.5)$		B1
	For B1 allow eg $8(x + 1.25)(x - 3.5)$		B1
	Condone missing final bracket for B2 or B1		
	Ignore any attempt to 'solve' eg $(4x + 5)(2x - 7)$ in working lines with -1.25 and 3.5 on answer lines		B2