

1		4 × 8 rectangle drawn	M1 A1	Draws a rectangle with side lengths in the ratio 2:1 or lists possible dimensions in the ratio 2:1 or gives two numbers which multiply to 32 for correct diagram on grid
2		Shows reasoning to reach $y=3$	M1 M1 M1 A1	forms equation eg $2x + 6 = 5x - 9$ isolates x and number terms $3x = 15$ substitutes "5" into side length eg $2 \times 5 + 6 (=16)$ $48 \div 16 = 3$ or $16 \times 3 = 48$
				$48 \div 3 (=16)$ forms equation $2x+6="16"$ or $5x - 9="16"$ isolates x and number terms $2x="10"$ or $5x="25"$ shows $x=5$ for both solutions
				$3(2x + 6) = 48$ or $3(5x - 9) = 48$, condone missing bracket Isolates x and number terms $6x = "30"$ or $15x = "75"$ forms the second equation $x=5$ from 2 different equations.
3	(a)	12 cm ²	B1 B1	for numerical answer of 12 for units shown as cm ²
	(b)	kite	B1	cao
4	6	P1 P1 A1	for a process to set up an equation in x , eg $\frac{1}{2} \times 3x \times 3x = 162$ for a process to simplify to x^2 eg $x^2 = 162 \times 2 \div 9$ or $x^2 = 36$ cao	Must be a complete equation Can fit their equation if a quadratic
5	Triangle of area 18	M1 A1	for a complete method to find area of trapezium eg $\frac{1}{2}(2 + 7) \times 4 (= 18)$ OR for a triangle drawn of area 36 OR for a triangle that would give an area fit their area of trapezium for a triangle drawn of area 18 eg base = 6, height = 6 or base = 9, height = 4	The value for the area of the trapezium must be clear for the fit to be checked. Accept use of dimensions that are not whole numbers as long as the intention is clear