

Q1. (2021)

(A)

Q	Answer	Mark	Comments
18(a)	20	B1	

(B)

Q	Answer	Mark	Comments
18(b)	$28 - 20$ or $\frac{36 - 20}{2}$ or $\frac{44 - 20}{3}$ or $\frac{52 - 20}{4}$ or $\frac{60 - 20}{5}$ or correct calculation using any two points, eg $\frac{60 - 44}{2}$ or 2×4	M1	
	8	A1	
	Additional Guidance		
	(60 ÷ 5 =) 12		M0A0

(C)

Q	Answer	Mark	Comments
18(c)	Alternative method 1		
	their 20 + 7 × their 8	M1	oe
	76	A1ft	correct answer or ft their values in (a) and (b)
	Alternative method 2		
	60 ÷ 2 × their 8	M1	oe
	76	A1ft	correct answer or ft their values in (b)
	Additional Guidance		
	For Alt 2, they may read off any cost for n minutes (from 1 to 5) and add on $(7 - n) \times$ their (b) for M1. A1 or A1ft may follow from their working		

Q2. (2021)

Question	Answer	Mark	Comments
29	$y = \frac{k}{x}$	B1	

Q3. (2022)

Q	Answer	Mark	Comments
16	At least two points from (0, 1) (1, 3) (2, 5) and (3, 7)	M1	may be seen in a table of values or embedded in calculations may be implied by correct line $\pm \frac{1}{2}$ square tolerance
	Correct straight line between (1, 3) and (2, 5)	A1	$\pm \frac{1}{2}$ square tolerance
	[1.15, 1.25] from using the graph or 1.2	B1ft	oe ft x-coordinate of any line drawn that intersects the given line $\pm \frac{1}{2}$ square tolerance
	Additional Guidance		
	Ignore further work after B1 scored		
	1.2 with M0 scored		M0A0B1
	1.2 with two correct points seen but no or incorrect line		M1A0B1
	For the A1, ignore incorrect lines unless used to read off for intersection and then only allow for the B1ft		
	Answer given as coordinates eg (1.2, 3.4)		B0

Q4. (2022)

Q	Answer	Mark	Comments
17	segment	B1	

Q5. (2023)

Q	Answer	Mark	Comments
23	Any two from: Reference to graph passing through point where $x = 0$ Reference to graph being incorrect for negative x values Reference to the graph stopping before the end of the axes/axis	B2	B1 any one correct reference eg the graph touches the y -axis eg the graph to the left of the y -axis should be below the x -axis eg the graph should go to the ends of the axes
	Additional Guidance		
	Ignore non-contradictory, irrelevant responses alongside a correct response		
	Draws correct graph		B2
	Draws graph with one section correct for positive values of x or negative values of x		B1 for that section
	'It isn't the graph of $y = \frac{1}{x}$ ', scores B0, but B1 may still be scored for the other criticism		
	'There are no numbers on the axes' scores B0, but B1 may still be scored for the other criticism		
	Mark for graph touching y -axis		
	You cannot have $x = 0$		B1
	The line in the top right should be moved to the right		B1
	It says x doesn't = 0 but it (the sketch) does		B1
	One line is touching the y -axis		B1
	The lines should be symmetrical		B0
	You cannot have $y = 0$		B0
	One line is touching the y -axis but the other isn't		B0

23 cont	Mark for negative values being in the wrong quadrant	
	There shouldn't be anything in the top-left section	B1
	There should be something in the bottom-left section	B1
	It is the graph of $y = \frac{1}{x^2}$	B1
	It should have rotational symmetry	B1
	It should be symmetrical about $y = x$	B1
	It should be symmetrical about $y = -x$	B1
	It should be symmetrical	B0
	One should be negative	B0
	The bit on the left is wrong	B0
	The negative values are plotted incorrectly	B0
	Reference to the graph stopping before the end of the axes	
	It stops before the end of the axes	B1
	The lines don't go far enough	B1
	The lines need to be higher up	B0