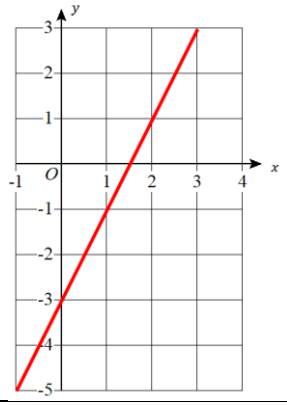
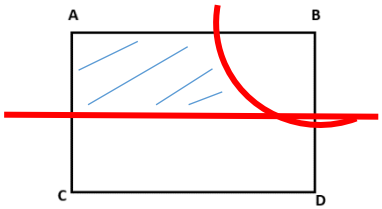
Year 8 Summer Assessment NON_CALC Mark Scheme

Question	Answer	Mark	Notes
1	102	B1	cao
2	325	M1 A1	For a correct method shown with no more than one numerical error. cao
3	48.26	M1 A1	For a correct method shown with no more than one numerical error. cao
4	21568	M1 A1	For a correct method shown with no more than one numerical error. cao
5 (a) 5 (b)	C and D A and E	B1 B1	cao cao
6 (a) 6 (b)	68000 560	B1 B1	cao cao
7	8a - 3b	B2 B1	cao for either 8a or -3b seen

8 (a) 8 (b)	<table><tr><td>x</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>y</td><td>**-5**</td><td>**-3**</td><td>**-1**</td><td>**1**</td><td>**3**</td></tr></table> 	B2 B1 B2 B1	For all *y* values correct For 3 or 4 correct *y* values cao For at least 3 of 'their' points plotted correctly.
9	6,000,000	B1	cao
10 (a) 10 (b)	65 $\frac{27}{250}$	B1 B2 B1	cao cao For $\frac{108}{1000}$ or equivalent seen
11	$2x + 26$	B2 B1	cao For either $6x + 18$ seen or $-4x + 8$ seen or an answer in the form $2x + a$ where $a \neq 26$ or an answer in the form $bx + 26$ where $b \neq 2$
12	8	M1 A1	For correct equation set up as $\frac{12 \times h}{2} = 48$ or equivalent, or intention seen to multiply 48 by 2. cao
13	$4 \times (2 + 3) = 20$ $5 + (6 \div 2)^2 = 14$	B1 B1	cao cao

14 (a) 14 (b)	9 125	B1 B1	cao cao
15	3 : 4	B1	cao
16 (a) 16 (b)	$\frac{1}{6}$ $\frac{5}{6}$	B1 B1	oe oe
17 (a) 17 (b)	224 22.50	M1 A1 M1 A1	For 10% = 64 or 5% = 32 seen or 35 ÷ 100 × 640 cao For method to work out 25% of 30 (=7.50) cao
18	Andy with correct working shown	M1 A1	For converting $\frac{24}{40}$ in to a percentage (=60%) or for method of finding 62% of 40 (=24.8) Andy written with correct figures shown to compare 60% and 62% or 24 and 24.8
19	990	M1 A1	For 450 ÷ 5 (= 90) cao
20	120	M1 M1 A1	For method to find perimeter 9 + 3 + 9 + 3 (= 24) (Indep) for converting any value from cm to m [ ] x 500 or [ ] x 5 4,500 or 1,500 or 45 or 15 implies 2nd M1 cao
21	200	M1 A1	For $\frac{5\times8}{2}(=20)$ cao

22		B1 B1 B1	For perpendicular bisector of AC For 3 cm arc from B. For correct section shaded.
23	4/5, 0.805, 0.816, 82%	B2 B1	cao (accept correctly converted values) For at least two correct conversions to a comparable form. Fractions must have the same denominator. 0.8 0.805 0.816 0.82 80% 80.5% 81.6% 82%

Extension Questions

1	36	M1 M1 A1	For finding length AM or MB e.g. 24 ÷ (5 + 3) × 5 or 15 or 24 ÷ (5 + 3) × 3 or 9 Fully correct method to find the area e.g. (24 ÷ 3) × "9" ÷ 2 Cao
2		B2 B1	For a fully correct reason i.e. 4 × 5 – 3 = 17 or It goes through (5, 17) or The 18 should be 17 or 21 ÷ 4 = 5.25 or 5 should be 5.25 For a partial reason i.e. 4 × 5 – 3 or 18 = 4x – 3

3	(a) $5r + 3m$	B2 B1	Oe For either $5r$ or $3m$
	(b) 17	M1	For equating both equations e.g. $3r + 2m = 10$ and $r + m = 3$, or $3r + 2m = 10$ and $2r + 2m = 6$, or $3r + 2m = 10$ and $3r + 3m = 9$
		A1	For either $r = 4$ or $m = -1$
		A1ft	ft using their answer to part (a)