

MEMORANDUM / MARKING GUIDELINE

GRADE 8 · TERM 3 · 2026

Data Handling · Geometry of Straight Lines · Geometry of 2D Shapes

TOTAL: 50 MARKS

DURATION: 1 HOUR

EXAMINER: MR SIMONS

Each ✓ = one mark. Accept any correct alternative method or reason.

SECTION A: MULTIPLE CHOICE [8 MARKS]

Question	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
Answer	C	D	B	D	D	C	B	A

[8]

SECTION B – QUESTION 2: DATA HANDLING [16]

2.1.1	15 learners ✓	✓ answer	(1)
2.1.2	Mode = 42 ✓ (it appears three times)	✓ mode	(1)
2.1.3	There are 15 marks, so the median is the 8th mark ✓ Median = 40 ✓	✓ the 8th mark ✓ answer	(2)
2.1.4	Range = 54 – 24 ✓ = 30 ✓	✓ 54 – 24 ✓ answer	(2)
2.2.1	Grapes ✓	✓ answer	(1)
2.2.2	16 + 12 + 8 + 4 ✓ = 40 learners ✓	✓ adding the four bars ✓ answer	(2)
2.2.3	$\frac{200}{40} = 5$ ✓ (the grade is 5 times the size of the class) 16 × 5 ✓ = 80 learners ✓ (Accept: $\frac{16}{40} \times 200 = 80$)	✓ dividing 200 by 40 ✓ 16 × 5 ✓ answer	(3)
2.3.1	(a) = 30 – (4 + 9 + 7) = 10 ✓	✓ answer	(1)
2.3.2	20 – 29 ✓ (the highest frequency, 10)	✓ modal interval	(1)
2.4.1	A sample ✓	✓ a sample	(1)
2.4.2	The 32 learners all come from ONE class, so they do not represent all 850 learners ✓ (Accept: the sample is too small / the sample is biased)	✓ one valid reason	(1)
		TOTAL	[16]

QUESTION 3: GEOMETRY OF STRAIGHT LINES [14]

3.1.1	$90^\circ - 35^\circ = 55^\circ$ ✓	✓ answer	(1)
3.1.2	$180^\circ - 108^\circ = 72^\circ$ ✓	✓ answer	(1)
3.2.1	$3x + 2x = 180^\circ$ ✓ (angles on a straight line) ✓ $5x = 180^\circ$ $\therefore x = 36$ ✓	✓ $3x + 2x = 180^\circ$ ✓ reason: angles on a straight line ✓ answer	(3)
3.2.2	$\hat{BOD} = \hat{AOC} = 3(36^\circ) = 108^\circ$ ✓ (vertically opposite angles) ✓	✓ answer ✓ reason: vertically opposite angles	(2)
3.3.1	$x = \hat{MND} = 74^\circ$ ✓ (corresponding angles, $AB \parallel CD$) ✓	✓ answer ✓ reason: corresponding angles	(2)
3.3.2	$y = \hat{AMN} = x = 74^\circ$ ✓ (alternate angles, $AB \parallel CD$) ✓ (Accept: vertically opposite $\hat{FMB}$)	✓ answer ✓ reason: alternate angles	(2)
3.3.3	$(2a + 16)^\circ + 74^\circ = 180^\circ$ ✓ (co-interior angles, $AB \parallel CD$) ✓ $2a + 90 = 180 \therefore 2a = 90$ $\therefore a = 45$ ✓ (Check: $2(45) + 16 = 106^\circ$)	✓ $(2a + 16)^\circ + 74^\circ = 180^\circ$ ✓ reason: co-interior angles ✓ answer	(3)
		TOTAL	[14]

QUESTION 4: GEOMETRY OF 2D SHAPES [12]

4.1.1	$x + 2x + 3x = 180^\circ$ ✓ (the sum of the interior angles of a triangle) ✓ $6x = 180^\circ$ $\therefore x = 30$ ✓	✓ $x + 2x + 3x = 180^\circ$ ✓ reason: angle sum of a triangle ✓ answer	(3)
4.1.2	$3x = 3(30^\circ) = 90^\circ$ ✓	✓ answer	(1)
4.1.3	A right-angled triangle ✓ One of its angles ($\hat{R} = 90^\circ$) is a right angle ✓	✓ right-angled ✓ reason	(2)
4.2.1	$\hat{B} = \hat{C}$ ✓ (the base angles of an isosceles triangle, $AB = AC$) ✓ $44^\circ + \hat{B} + \hat{C} = 180^\circ$ (sum of the interior angles of a triangle) $2\hat{B} = 136^\circ$ $\therefore \hat{B} = 68^\circ$ ✓	✓ $\hat{B} = \hat{C}$ ✓ reason: base angles of an isosceles triangle ✓ answer	(3)

4.3.1	$x = 52^\circ + 61^\circ$ ✓ (the exterior angle of a triangle = the sum of the two opposite interior angles) ✓ $\therefore x = 113^\circ$	✓ $52^\circ + 61^\circ$ ✓ reason: exterior angle	(2)
4.3.2	$\widehat{DFE} = 180^\circ - 113^\circ = 67^\circ$ ✓ (angles on a straight line)	✓ answer	(1)
		TOTAL	[12]

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ANALYSIS OF COGNITIVE LEVELS

CAPS Senior Phase (Grades 7–9) Mathematics weighting.

Cognitive level	Marks	% of paper	CAPS target	Questions
Level 1: Knowledge	14	28%	25%	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1.1, 2.1.2, 2.2.1, 2.3.2, 2.4.1, 3.1.1, 3.1.2
Level 2: Routine procedures	24	48%	45%	1.8, 2.1.3, 2.1.4, 2.2.2, 2.3.1, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 4.1.1, 4.1.2, 4.3.1, 4.3.2
Level 3: Complex procedures	8	16%	20%	3.3.3, 4.1.3, 4.2.1
Level 4: Problem solving	4	8%	10%	2.2.3, 2.4.2
TOTAL	50	100%	100%	