



MATHEMATICAL LITERACY PAPER 2

PRELIMINATION EXAMINATION: MARKING NOTES

QUESTION	SOLUTION
1.1.6	Accept $\frac{3}{71}$ ✓A ✓A
1.3.1	Accept X
2.1.4	Alternate response: $\checkmark$ RT ✓RT $= 385 - 78$ $= 307$ ✓CA
2.1.7	Accept unrounded value
2.2.2	Alternate response: $7,2 \ell : 100 \text{ km}$ $? \quad 748 \text{ km}$ $\checkmark$ MA $\frac{748}{100} \times \frac{7,2}{1} = 53,856 \ell$ ✓CA $\checkmark$ MA $\therefore$ No/ incorrect ✓O Follow the steps of the learner
3.1.3b	Accept: $\checkmark$ SF Surface area = $(4,004 + 2,0072)$ $= 6,0112 \text{ m}^2 \times 2$ ✓MCA $= 12,0224 \text{ m}^2$ ✓CA No. of liters = $\frac{12,0224}{3} \times 2$ ✓MCA $= 8,01493 \ell$ ✓CA No. of tins = $\frac{8,014933}{5}$ $= 1,603 \text{ tins}$ ✓CA $\approx 2 \text{ tins}$ ✓R
4.1.2	6 or 7 doors ✓✓A
4.1.3	$\frac{1}{3}$ ✓A ✓A
4.1.4	*If learners use: • An incorrect value for the length (-1) • cm and convert to m (-1 for incorrect unit used) • If use width instead of length (-1)

4.3.1	CHECK UNIT USED IN 4.1.4 Alternate response:: Accept: $\frac{\text{Area of living room}}{\text{Area of Tile}} = \text{Number of tiles}$ Area Living Room: 130×100 ✓C $= (130 \times 0,0254) \times (100 \times 0,0254)$ $= 3,302 \times 2,54$ ✓MCA $= 8,387\text{m}^2$ ✓CA Tile: $\frac{850}{1000} = 0,85 \text{ m}$ $\frac{650}{1000} = 0,65 \text{ m}$ } ✓C Area of tile : $0,85 \times 0,65\text{m} = 0,5525\text{m}^2$ ✓CA ✓MCA Number of tiles = $\frac{8,387}{0,5525} = 15,2 \text{ tiles}$ ✓CA thus 16 tiles ✓R STATEMENT INVALID ✓O Also note: Tile: $\frac{850}{1000} = 0,85 \text{ m}$ $\frac{650}{1000} = 0,65 \text{ m}$ } ✓C Area of tile : $0,85 \times 0,65\text{m} = 0,5525\text{m}^2$ ✓CA ✓MCA ✓RT ✓CA FOR 20 TILES: $0,5525 \times 20 \text{ tiles} = 11,05\text{m}^2$ Area Living Room: 130×100 ✓C $= (130 \times 0,0254) \times (100 \times 0,0254)$ $= 3,302 \times 2,54$ ✓MCA $= 8,387\text{m}^2$ ✓CA Thus incorrect as 20 tiles more that required ✓O However: Can't accept reason if only 20 tiles done and nothing else Early rounding(-1) max 8 If use square tile correctly (-1) max 8 Accept If a learner says 20 is good because of breakage,.
4.3.2	If learner used 50 tiles only: $\frac{50}{4} = 12,5$ thus 13 boxes ✓CA ✓R ✓CA

4.3.3	Alternate responses: If learner used 66 tiles: $\frac{40 \times 66}{10} = 264 \text{ min} \div 60 = 4,4 \text{ hrs} \quad \checkmark \text{C} \quad \checkmark \text{CA}$ $9:20 + 1\text{h}22 + 4\text{hrs } 24\text{min} = 15:08 \quad \checkmark \text{MCA} \quad \checkmark \text{CA}$ IF USE 40 MIN ONLY: 1CA mark
5.1.3	Alternate responses: 2cm: $\frac{2 \times 4575000}{100\,000} = 91,5\text{km}$ Time 2hrs 6min thus 2,1hrs Speed = $\frac{91,5}{2,1\text{hrs}} = 43,57\text{km/h}$ 2,8cm: $\frac{2,8 \times 4575000}{100\,000} = 128,1\text{km}$ Time = 2hrs 46min = 2,76hrs Speed = $\frac{128,1}{2,76\text{hrs}} = 46,30\text{km/h}$ OR Time = $\frac{128,1}{43,57} = 2.94 \text{ hrs}$ = 2h56min
5.1.4	Alternate responses: Budgeted amount: $\frac{2500}{18,20} = \text{€ } 137,36$ Thus, $\text{€}137,36 \times \frac{110}{100} = \text{€}151,10$ Thus not enough Even learners comparing € 137 and €157 can conclude it is not enough Also: $\text{€}157 \times \frac{1}{10} = \text{€}15,7$ Budgeted amount: $\frac{2500}{18,20} = \text{€ } 137,36$ It is enough
5.2.3	Minus 1 when using 5 months correctly

