

**Grade 12 Mathematical Literacy: Memorandum Paper 1**

<b>Section A</b>					
1.1.1	306 ✓	1	3.2.1	= 0,38% ✓	1
1.1.2	72 ✓	1	3.2.2	30 games ✓	
1.1.3	R280 ✓	1		+ Goal Diff means more goals scored for than against ✓	
1.1.4	2,3 ✓	1		- Goal Diff means more goals scored against than for. ✓	2
1.2.1	4m = 4000mm ✓	1	3.2.3	A. $30 - (12+4) = 14$ ✓	
1.2.2	5,34million = 5 340 000 ✓	1		B. $(39 - 33) = +6$ ✓	
1.2.3	500ml = 0,5l ✓	1		C. $32 - C = 4 \Rightarrow C = 28$ ✓	
1.3	$R33,96 \div 12 = R2,83$ ✓	2		D. $(D-42) = -2 \Rightarrow D = 40$ ✓	4
1.4	$100 \div 2 = 50$ days ✓ $50 \div 7 = 7,142...$ ✓ $\approx 7$ weeks ✓	3	3.2.4	Free State Stars drew most of the games that they did not lose. ✓ Mamelodi Sundowns won most of the games they did not lose. ✓ Wins score 3 points whereas draws only score one point. Or any other valid solution.	2
1.5	$19:00 - 16:30 = 2$ h 30 m $12 \times 2$ h 30 m = 30h ✓ $30 \times 15 = R450$ ✓	2	3.2.5	From the table we see that a win is worth 3 point and a draw 1 point. ✓ So the final points for Thembisa Classic will be $(7 \times 3) + (9 \times 1) = 30$ points ✓	3
1.6	$2:5 = 10:25$ ✓ $\therefore 25$ ml of water ✓	2	4.1	Caledonian Kwikspar ✓	1
1.7	$(60 \div 100) \times 30 = 18$ $\therefore 18$ players left ✓	2	4.2	$17:56:00 = 5:56$ pm ✓ ✓	2
1.8	$38,8$ degrees ✓ ✓ (accuracy)	2	4.3	$R143,60$ ✓ ✓	2
1.9	$4$ kg = 4000g $4000g \div 500g = 8$ ✓ $\therefore 8 \times 20 + 15 = 175$ minutes ✓ = 2h 55m ✓	3	4.4	$R143,60 + R31,84 = R175,44$ $(R24,56 \div R175,44) \times 100 = 13,999$ ✓ $\approx 14\%$ ✓	3
1.10	$(180 \div 970) \times 100 = 18,6\%$ ✓ ✓	3	4.5	$R143,60 \div 470,88$ unit ✓ = $R0,30496$ per unit ✓ = 30,50 cents per unit ✓	3
2.1.1	$R3000$ ✓ and $R20\ 000$ ✓	2	4.6	$470,88 \div 35 = 13,45$ days ✓ approx. 13 days ✓ ✓	3
2.1.2	$100 - 75 = 25\%$ ✓	2	4.7	August has 31 days $31 \times 35 = 1085$ units ✓ $1085 \times 30,50$ cents = 33092,5 cents $\approx R331$ ✓ $R331 + R31,84 = R362,84$ ✓ VAT = 14% of $R362,84$ ✓ = $R50,80$ ✓ Final total = $R413,64$ ✓ OR If the learner used 30 days: $30 \times 35 = 1050$ units ✓ $1050 \times 30,50$ cents = 32025cents $\approx R320$ ✓ $R320 + R31,84 = R351,84$ ✓ VAT = 14% of $R351,84$ ✓ = $R49,26$ ✓ Final total = $R401,10$	6
2.1.3	$(40 \div 100) \times 20\ 000 = R8\ 000$ ✓	2			
2.1.4	1. Food $(55 \div 100) \times 3\ 000 = R1\ 650$ ✓ 2. Food $(14 \div 100) \times 20\ 000 = R2\ 800$ ✓ $\therefore 2$ spent more ✓	5			
2.2.1	$R1\ 630 \div 4 = R407,50$ ✓ = $R400$ ✓ to nearest $R100$	2			
2.2.2	$(9 \times 4,98) + (7 \times 4,70) + (2 \times 3,98) = R85,68$ ✓	4			
2.2.3	A. $2 \times R5,90 = R11,80$ per kg ✓ B. $R12,99 \div 2,5 = R5,20$ per kg ✓ C. $R27 \div 5 = R5,40$ per kg ✓ D $R50 \div 10 = R5$ per kg ✓ $\therefore D B C A$ ✓	5			
2.2.4	It will use up too much of her budget on one item.(or similar answer) ✓ ✓	2			
3.1.1	$2600 \div 2 \div 5 = 260$ people ✓	3			
3.1.2	$350 \times 260 = 91\ 000$ ml ✓ = 91liters ✓	2			
3.1.3	$260 \div (12 \times 2) = 10,8$ ✓ $\therefore 11$ crates ✓	3			
3.1.4	$910 \div 26000 \times 100 = 3,5$ ✓	2			

**Section B**

- 1.1.1  $24 \times 864 \checkmark$   
= R20 736  $\checkmark$  2
- 1.1.2  $60 \times 470 \checkmark$   
= R28 200  $\checkmark$  2
- 1.13 Borrowing for a shorter time involves less interest  $\checkmark \checkmark$  2
- 1.2  $R470 \times 60 - R16\ 000 \checkmark \checkmark$   
= R12 200  $\checkmark$  3
- 1.3 Premium =  $16 \times 3,95 \checkmark \checkmark$   
= R63,20  $\checkmark$   
Admin fee = R9,50  $\checkmark$  4
- 1.4.1 One year interest =  $(18 \div 100) \times 16\ 000 \checkmark$   
= R2 880  $\checkmark$   
 $\therefore$  5 years interest = R14 400  $\checkmark$   
Total = R16 000 + R14 400 = R30 400  $\checkmark$   
OR  
 $I = p \times i \times t$   
=  $R16\ 000 \times 18\% \times 5$   
= R14 400  
Total = R16 000 + R14 400 = R30 400 4
- 1.4.2  $A = 16\ 000(1 + 0,16)^5$   
=  $16\ 000(1,16)^5 \checkmark \checkmark \checkmark \checkmark \checkmark$   
= R33 605  
OR
- | End of:              | Interest  | Amount     |
|----------------------|-----------|------------|
| 1 <sup>st</sup> year | R2 560    | R18 560    |
| 2nd year             | R2 969,60 | R21 529,60 |
| 3rd year             | R3 444,74 | R24 974,34 |
| 4th year             | R3 995,89 | R28 970,23 |
| 5th year             | R4 635,24 | R33 605,47 |
- 1.5 SANLAM is the best option  $\checkmark$  1
- 2.1 445 000 people  $\checkmark$  1
- 2.2 South East Asia  $\checkmark$  1
- 2.3 41 to 356 per 100 000  $\checkmark \checkmark$  2
- 2.4 Africa because it has the highest rate per 100 000  $\checkmark \checkmark$  2
- 2.5  $100\ 000 \div 140 \checkmark$   
 $\approx 714 \checkmark$   
1 in every **714** people was infected with TB in 2004  $\checkmark$  3
- 2.6  $2\ 250\ 000 \div 100\ 000 = 22,5 \checkmark$   
 $22,5 \times 41 = 922,5 \checkmark$   
anywhere between 900 and 950 people  $\checkmark$  3
- 2.7  $8\ 918\ 000 \times 10 \div 100 \checkmark$   
= 891 800  $\checkmark$   
 $8\ 918\ 000 - 891\ 800 = 8\ 026\ 20$  cases  $\checkmark$  3
- 3.1  $6,5 \times 80 \checkmark$   
= 520km  $\checkmark$  2
- 3.2 Need to stop twice.  $\checkmark$   
Possibly at Swellendam and Mossel Bay. (or similar sensible ideas)  $\checkmark \checkmark$  3
- 3.3 520 km at 90km/h = 5,78 hours  $\checkmark$   
0,78hours =  $0,78 \times 60\text{min} = 46,8$  min  $\checkmark$   
 $\approx 45\text{min}$   
 $\therefore$  total time = 5h 45 min + 1h 30min  $\checkmark$  5

- = 7h 15 min  $\checkmark$   
 $\therefore$  arrival time  $\approx 15:15 \checkmark$
- 3.4.1  $60 \times R7 \checkmark$   
= R420  $\checkmark$  2
- 3.4.2  $650\text{km} \div 60\text{liters} \checkmark \checkmark$   
= 10,8km/litre  $\checkmark$  3
- 3.4.3 Max:  $R407 \times 8 \checkmark$   
= R3 256  $\checkmark$   
Std:  $R252 \times 8 = R2\ 016 \checkmark$  3
- 3.4.4 Any two of these answers:  
They get a tank of petrol worth R420.  
Can have an extra driver for the car.  
The driver can be young.  
There is extra damage control. 2