



MEMO Mathematics Literacy

Paper 1: 2013

QUESTION 1:		
1.1	$30,18\% = \frac{1509}{50}$	✓✓ (2)
1.2	$\frac{112}{165} \times 100 = 67,88\%$	✓✓ (2)
1.3	$1\frac{1}{3}(0,35 + 1,70) - \sqrt{2,25} = \frac{4}{3}(\frac{41}{20}) - \frac{3}{2} = 1,23$	✓✓✓ (3)
1.4	$441504000 \text{ sec} = 7358400 \text{ min}$ $7358400 \text{ min} = 122640 \text{ hours}$ $122640 \text{ hours} = 5110 \text{ days}$ $5110 \text{ days} = 14 \text{ year}$	✓ ✓ ✓ ✓ (4)
1.5	$60 \text{ km} : R14,40$ $1 \text{ km} : R0.24$ $49 \text{ km} : R11,76$	✓✓ (2)
1.6	$1 \text{ ZAR} : 11,06\text{€}$ $1300 \text{ ZAR} : 14378\text{€}$	✓✓ (2)
1.7	$1 \text{ cm} : 10 \text{ mm}$ $770 \text{ cm}; 7700 \text{ mm}$	✓✓ (2)
1.8	$7 + 6 + 5 = 18$ $\frac{7}{18} \times R1620 = R630$ $\frac{6}{18} \times R1620 = R540$ $\frac{5}{18} \times R1620 = R450$	✓ ✓ ✓ ✓ (4)



MEMO Mathematics Literacy

Paper 1: 2013

1.9

SPAR		
Ferndale		
Tel: 021 185 5555		Fax: 021 185 5556
Vat No: 484275681		
Pepper		R7,12
Cinnamon		R5,67
Butter		R 8,99
Brown bread		R12,99 *
Toilet paper		R32,65
5 Balance due	1.9.1	<u>R67,42</u>
Rounding	1.9.2	<u>R67,40</u>
Cash		R 200,00
Tax Code	Taxable Value	Tax value
VAT (12%)	R54,43	1.9.3 <u>R6,53</u>
Zero VAT	R32,65	R0,00
Total VAT		1.9.4 <u>R6,53</u>
Change	1.9.5	<u>R132,58</u>

Cashier: Saun		
12:58:28	18-07-2012	
Thanks for shopping at SPAR. Have a great day!		

✓✓
✓✓

✓✓
✓✓

✓✓

(10)

1.10.1

$$t = 0$$

✓✓

(2)

1.10.2

$$s = t^3 + t - 2$$

$$s = (2)^3 + (2) - 2$$

$$s = 8m$$

✓✓

(2)

1.11

$$\frac{3}{2} - \frac{3}{6} \times \frac{2}{5} = \frac{13}{10}$$

✓✓

(2)

✓✓

(2)

1.12

$$2568569m^2 = 2,5686km$$

✓✓

(2)

1.13

Impossible

1.14

24brownies : 250ml

1brownie : 10,4166'

84brownies : 875ml

✓✓

(2)



MEMO Mathematics Literacy

Paper 1: 2013

QUESTION 2:		
2.1	$\frac{1}{4}$	✓✓ (2)
2.2	17h50	✓✓ (2)
2.3	30°	✓✓ (2)
2.4	<i>Circumference</i> = $2\pi \times \text{radius}$ <i>Circumference</i> = $2\pi \times \frac{45}{2}$ <i>Circumference</i> = 141,37cm	✓✓ (2)
2.5	<i>Area</i> = $\pi \times (\text{radius})^2$ <i>Area</i> = $\pi \times (\frac{43}{2})^2$ <i>Area</i> = 1452,20cm² <i>Yellow</i> = $\frac{1}{2} \times 1452,20\text{cm}^2$ <i>Yellow</i> = 726,10cm²	✓✓ (4)
QUESTION 3:		
3.1	<i>Dis tan ce</i> = 114,8km / h × 1,083' <i>Dis tan ce</i> = 124,37km	✓✓ (2)
3.2	<i>Dis tan ce</i> = 210km / h × 1,083 <i>Dis tan ce</i> = 227,5km	✓✓ (2)
3.3	$\frac{227,5 - 124,37}{124,37} \times 100 = 82,92\%$	✓✓✓ (3)
3.4.1	Accelerating	✓✓ (2)
3.4.2	Constant speed	✓✓ (2)
3.4.3	Decelerating	✓✓ (2)
3.4.4	The train is not moving for the speed is 0km/h	✓✓ (2)
3.4.5	25 minutes	✓✓ (2)



MEMO Mathematics Literacy

Paper 1: 2013

QUESTION 4:		
4.1.1	$Total = R20000 + (R2345,55 \times 60)$ $Total = R20000 + R140733$ $Total = R160733$	✓✓ (2)
4.1.2	$Difference = R160733 - R129999$ $Difference = R30734$	✓✓ (2)
4.1.3	$A = P(1 - i)^n$ $A = R125000(1 - 0,0125)^3$ $A = R120370,85$	✓✓ ✓ (3)
4.1.4	$Cost = 110l \times R12,26 = R1348,60$	✓✓ (2)
4.1.5	$25km : 2liter$ $12,5km : 1liter$ $1375km : 110liter$	✓ ✓✓ (3)
4.2.1	A. R16456 B. R13609	✓✓ (2)
4.2.2	$\frac{R1600}{R16456} \times 100 = 9,72\%$	✓✓ (2)
4.2.3	$Income - Expenses = R16456 - R13609$ $Income - Expenses = R2847$ Yes, after all expenses are paid he is left with R2847	✓✓ (2)
4.2.4	Rent	✓✓ (2)
4.2.5	Banking fees	✓✓ (2)
4.2.6	Yes, expenses < income	✓✓ (2)
QUESTION 5:		
5.1	C3	✓✓ (2)
5.2	Jhb Technical College and Technikon Witwatersrand	✓✓ (2)
5.3	Van Beek Street	✓✓ (2)
5.4	Ellis Park station	✓✓ (2)



MEMO Mathematics Literacy

Paper 1: 2013

5.5	Staib Street	✓✓	(2)
5.6	Leonard Rayne Theatre	✓✓	(2)
5.7	$R155 \times 7 = R1085$	✓✓	(2)
5.8	Right in Staib, left in Currey Street, left in Sivewright Avenue, over Beit Street	✓ ✓ ✓	(3)
QUESTION 6:			
6.1	$Area = (10m \times 8,5m) + (3m \times 4m)$ $Area = 97m^2$	✓✓	(2)
6.2	$Tiles\ needed = \frac{12m^2}{0,3^2 m^2} = 133,3'$ Tiles needed ≈ 134	✓ ✓	
6.3	Boxes needed: $134 \div 6 = 22,3' \approx 23$ boxes $Cost = 23boxes \times R145,99 = R3357,77$	✓	(3)
6.4	$17,5m^2 : 10m^2$ $1,75m^2 : 1m^2$	✓✓	(2)
6.5	$Volume = \pi r^2 \times h$ $Volume = \pi \times (0,4)^2 \times 1,35$ $Volume = 0,68m^3$	✓✓ ✓	(3)
6.6	$6Doors = R205 \times 6 = R1230$ $Discount = 3\% of R1230$ $Discount = \frac{3}{100} \times R1230$ $Discount = R36,90$ Cost for 6 doors = $R1230 - R36,90$ $= R1193,10$	✓ ✓	 (3)
6.7	Meters required = $(2 \times 2) = 4m$ Cost = $4m \times R102,98 = R411,92$	✓ ✓✓	 (3)



MEMO Mathematics Literacy

Paper 1: 2013

QUESTION 7:

7.1.1

$$\frac{6}{20} \times 100 = 30\%$$

✓✓

(2)

7.1.2

25%

✓✓

(2)

7.1.3

$$20\% \times 20 = 4$$

✓✓

(2)

7.1.4

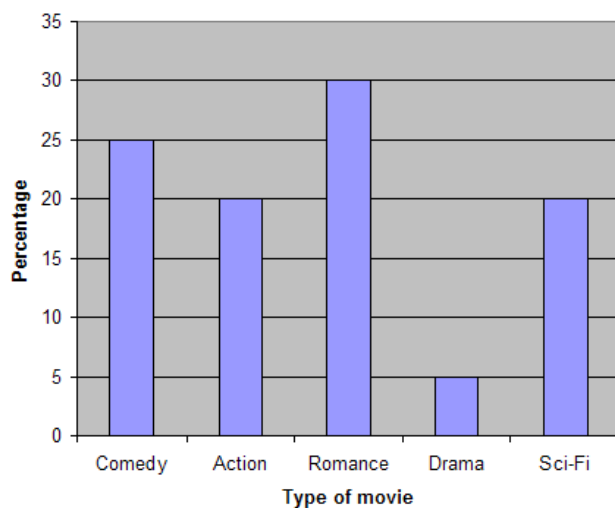
$$\frac{6}{20} \times 360^\circ = 108^\circ$$

✓✓

(2)

7.1.5

Favourite movies for teenagers



✓✓✓

(3)

7.2.1

	Right-handed	Left-handed	Totals
Male	41	12	53
Female	38	9	47
Totals	79	21	100

✓✓

(2)

7.2.2

42,86%

✓✓

(2)

7.2.3

Right-handed males

✓✓

(2)

7.2.4

41 : 38

✓✓

(2)