



Subject: Grade 10 Maths Literacy

Topic: Mathematical Literacy: Term 2 - Exam 1

Total: 140 Marks

1. D: OBZ Square

4 marks

Explanation:

The Jammie stop at OBZ Square is not close to a UCT parking area. The other three options are adjacent to UCT parking.

2. A: R6, 99

4 marks



Explanation:

The information is highlighted on the slip. You have to consider that he received a discount for each packet.

The original price of 1 packet of Oreo cookies is R8, 49. Peter received R1, 50 discount on each packet.

$$\begin{aligned}\text{Price paid} &= \text{R}8,49 - \text{R}1,50 \\ &= \text{R}6,99\end{aligned}$$



3. true

2 marks

Explanation:

As highlighted on the till slip, note the information provided.



4. C: a credit card

4 marks

Explanation:

As highlighted on the till slip, he used his credit card to pay for his purchases.



5. 4 | four

3 marks

Explanation:

The outcomes are WW, WL, LW, LL. That means there are 4 possible outcomes.

6. 3 | 4

4 marks

Explanation:

The 4 possible outcomes are WW, WL, LW, LL. This means that 3 out of the 4 possible outcomes contain at least one win, since only LL represents the outcome where they do not win in any of the rounds.

7. D: K

4 marks

Explanation:

Row P is the closest to the screen, but the first row after that, with no pink coloured *lovenest* seats, is **row K**.

8. true

2 marks

Explanation:

Half past 3 in the afternoon is read as 15 : 30 on a digital clock.

Elapsed time from 06 : 45 to 14 : 45 = 8 hours

Elapsed time from 14 : 45 to 15 : 30 = 45 minutes

The total elapsed time is therefore 8 hours and 45 minutes.

9. 27

3 marks

Explanation:

There are 3 desks with only 1 learner per desk, which means 3 learners.

The remaining 13 desks has 2 learners per desk ,which means $13 \times 2 = 26$ learners.

Furthermore 2 learners are not present.

27 learners are present: $3 + 26 - 2 = 27$

10. 23 700 | 237 | 2,37

6 marks

Explanation:

1. 1 kg = 1 000 g, which means that $23,7 \times 1\,000 = 23\,700$ g

2. 1 m = 100 cm, which means that $2,37 \times 100 = 237$ cm

3. 1 g = 1 000 mg, which means that $2\,370 \div 1\,000 = 2,37$ g

11. B: 23 June 2021

4 marks

Explanation:

If today is 4 June 2021, two weeks would mean that 14 days are added to 4 which will be 18 June 2021. An additional 4 days added to this date would make it 22 June 2021.

As the principal said that it is 2 weeks and 4 days before the start, we can conclude that the start date is 23 June 2021.

12. false

2 marks

Explanation:

There are 5 cups, with only 1 hidden treat.

$$\text{Probability} = \frac{1}{5}$$

$$\text{Probability as a percentage: } \frac{1}{5} \times 100 = 20\%$$

13. one | half

4 marks

Explanation:

375 ml can be broken up into 250 ml + 125 ml

$$250 \text{ ml} = 1 \text{ cup}$$

$$125 \text{ ml} = \frac{1}{2} \text{ cup}$$

14. 350

3 marks

Explanation:

180°C is the temperature given in the recipe. Therefore, 180°C must be converted to °F:

$$180^{\circ}\text{C} \times \frac{9}{5} + 32 = 356^{\circ}\text{F}.$$

The dial only allows 350°F or 375°F, and 356°F is between those two values. The dial will therefore be turned to 350°F as it is closest to 356°F.

15. true

2 marks

Explanation:

The ratio is a $\frac{1}{4}$ cup of Parmesan cheese to 3 cups of Dheddar cheese, or $\frac{1}{4} : 3$.

When written in unit form, $\frac{1}{4}$ is multiplied by 4, which means that 3 will also be multiplied by 4.

Therefore the answer is 1 : 12.

16. 0,22

3 marks

Explanation:

The description “yellow hockey ball or a green netball ball” refers to 2 of the possible combinations, YH and GN, out of a total of 9 combinations.

$$\therefore \frac{2}{9} = 0,22222...$$

Rounded to two decimal places means that the answer is 0,22.

17. false

2 marks

Explanation:

The **dependent variable** in this case is the **amount of data used** and the **amount of hours** is the **independent variable**.

The data used is dependent on the amount of hours spent streaming Netflix. The hours are not dependent on the data used when streaming, making the amount of hours independent in this scenario.

18. C: (2; 1)

4 marks

Explanation:

A coordinate is written as the independent value first with its corresponding dependent value second. (2; 1) is therefore the incorrect coordinate as it is written with the dependent value first, 2 and then the independent variable, 1.

19. 17,3 | 13

4 marks

Explanation:

A: Data usage = $1,7 \times 10 + 0,3$

$$\begin{aligned} A &= 17 + 0,3 \\ &= 17,3 \end{aligned}$$

B: The inverse will be applied to find out the time that 22,4 GB will give one.

Subtract the 0,3 GB first because it is not part of the data usage per hour:
 $22,4 - 0,3 = 22,1$

$$\begin{aligned} B &= 22,1 \div 1,7 \\ &= 13 \text{ hours} \end{aligned}$$

20. $D = 1,7t + 0,3$ | $1,7t + 0,3$

3 marks

Explanation:

1,7 GB is used per hour, which means the total data usage is 1,7 times the number of hours, plus the additional 0,3 GB used in the first hour.

$$\therefore D = 1,7t + 0,3$$

21. B: 235 240; 235 402; 253 420; 325 402

4 marks

Explanation:

First compare the hundred thousands, then the ten thousands, then the thousands, then the hundreds, then the tens and lastly the units.

The correct order is therefore:

235 240; 235 402; 253 420; 325 402;

22. D: It snows on Christmas Day in South Africa.

4 marks

Explanation:

Of these options, the option that is least likely is that it snows on Christmas Day in South Africa, as Christmas Day is on 25 December and that is in the middle of summer when temperatures are high.

23. 62,5

3 marks

Explanation:

First convert the total mass of the macaroni to the same unit as used in the recipe.

$$3,2 \text{ kg} = 3\,200 \text{ g.}$$

If she makes the recipe 6 times, it means that she will use a total of 2 500 g. (

$$250 \times 6 = 2\,500 \text{ g})$$

Therefore, she uses 2 500 g of the total 3 200 g.

The percentage is calculated as: $\frac{2\,500}{3\,000} \times 100 = 62,5\%$

24. A: J

4 marks

Explanation:

Row M is the first row from the entrance that is connected to the ramp, L the second row, K the third row and **J is the fourth row.**

25. F6 | F12

4 marks

Explanation:

The seats right next to each of the wheelchair allocations are either F6 or F12. She could choose either option if she wants to sit next to her grandmother.

26. false

2 marks

Explanation:

$$30\% \text{ of R}499,00 \text{ is: } \frac{30}{100} \times 499 = \text{R}149,70$$

$$\text{Total paid: R}499,00 - \text{R}149,70 = \text{R}349,30$$

Explanation:

The lowest common denominator is 12. It is found by taking the lowest common multiple of 3 and 4, and then writing each fraction as an equivalent fraction with a denominator of 12. This is done by multiplying the numerator with the same factor that was used to get the denominator equivalent to 12. Then only the numerators are added over the denominator, as previously determined.

$$\begin{aligned}\therefore \frac{2}{3} + \frac{1}{4} &= \frac{8}{12} + \frac{3}{12} \\ &= \frac{11}{12}\end{aligned}$$

The numerator is therefore 11 and the denominator is 12.

Explanation:

She walks 125 000 cm per day.

Each step is 25 cm.

$$25 \times 5\,000 = 125\,000 \text{ cm}$$

Conversion from centimetres to metres is done by dividing by 100 (1 m = 100 cm).

Conversion from metres to kilometres is done by dividing by 1 000 (1 km = 1 000 m).

The conversion will therefore be:

$$125\,000 \div 100 = 1\,250 \text{ m}$$

$$1\,250 \text{ m} \div 1\,000 = 1,25 \text{ km}$$

29. false

2 marks

Explanation:

The next payment due is on 1 June 2021.

Note the highlighted section on the statement.

STATEMENT	
Credit Available	R5,996.22
Statement Date	12 May 2021
Statement Period	13/04/2021 - 12/05/2021
Account Number	75099820348
Interest Rate – Revolving	17,50%
Payment Due Date	1 June 2021
Total Amount Owing	R3,822.78
Minimum Amount Due	R255.57
Overdue Amount	R0.00
Total Monthly Payment Due	R255.57



30. capeunionmart@rcsgroup.co.za

3 marks

Explanation:

Customer services telephone number, as well as an e-mail address, is given to be used with regards to any queries:

capeunionmart@rcsgroup.co.za (as highlighted on the statement).

**Brave Winter and shop the latest Softshell and mi
Union Mart today! Use your Ca**

Customer services: 0861 789 989

capeunionmart@rcsgroup.co.za

ACCOUNT SUMMARY
Credit Limit
Opening Balance
Interest
Fees
Insurance + Other Subscriptions
Payments Received
Closing Balance

31. 3 963,24 | 3 822,78 | 255,57

6 marks

Explanation:

Opening balance = R3 963, 24

Closing balance = R3 822, 78

Monthly payment due on 1 June 2021 = R255, 57

Notice the relevant as highlighted.



MR F DELPORT
24 MOPANIE WEG
PRETORIA EAST
9856

STATEMENT	
Credit Available	R5,996.22
Statement Date	12 May 2021
Statement Period	13/04/2021 - 12/05/2021
Account Number	75099820348
Interest Rate – Revolving	17,50%
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Brave Winter and shop the latest Softshell and midweight Fleece tops in-store or online at Cape Union Mart today! Use your Cape Union Mart Group card.

Customer services: 0861 789 989
capeunionmart@rcsgroup.co.za

ACCOUNT SUMMARY	
Credit Limit	R9,819.00
Opening Balance	R3,963.24
Interest	R54.54
Fees	R49.57
Insurance + Other Subscriptions	R18.00
Payments Received	R262.57 CR
Closing Balance	R3,822.78

TRANSACTION SUMMARY - REVOLVING		
Date	Description	Amount
12/05/2021	MONTHLY SERVICE FEE	R49.57
12/05/2021	CP INSURANCE	R18.00
12/05/2021	INTEREST	R54.54

TRANSACTION SUMMARY - PAYMENTS		
Date	Description	Amount
03/05/2021	DEBIT ORDER PAYMENT	R262.57 CR

32. false

2 marks

Explanation:

A red cross is the universal symbol for first aid or any type of medical help. The entrance which is the closest to the symbol of the red cross is Entrance 1.

Explanation:

The relevant information is circled on the map. The toilets are next to H&M and Zara, but Zara was not one of the options to select from. The ATM is in front of Woolworths.

**Explanation:**

The rate of R7,50 per km will be used for the first 5 km of the trip and then the rate of R6,50 per km will be used for the remaining 2,2 km of the 7,2 km trip.

$$\therefore 5 \times 7,50 + 2,2 \times 6,50 = \text{R}51,80$$

Remember when writing rands and cents, we use two decimal places. R51,8 is incorrectly written.

Explanation:

The tariff list is labelled as Star **bus** Service.

The rate of R7,50 per km will be used for the first 5 km of the trip and then the rate of R6,50 per km will be used for the next 5 km and lastly the rate of R5,50 per km will be used for the remaining 2 km of the 12 km trip.

$$\therefore 5 \times 7,50 + 5 \times 6,50 + 2 \times 5,50 = \text{R}81$$

It will therefore be better for her to purchase the daily ticket as this will save her R11.

$$\text{R}81 - \text{R}60 = \text{R}11$$

36. BH | YN | GR

6 marks

Explanation:

The row B/Y/G is used to write the first letter of the combination, whereas the column is used to write the second letter of the combination.

Therefore, 1 = BH, 2 = YN and 3 = GR

37. 0,4

3 marks

Explanation:

Rate per second:

$$25 \text{ seconds} \div 25 = 1 \text{ second}$$

To keep the rate equivalent, litres must also be divided by 25.

Therefore $10 \div 25 = 0,4$ litres per second.

38. true

2 marks

Explanation:

The temperature in Cape Town in Celsius needs to be converted to Fahrenheit.

$$17^{\circ}\text{C} \times \frac{9}{5} + 32 = 62,6^{\circ}\text{F}$$

The difference between New York and Cape Town's temperature:

$$\therefore 62,6 - 50 = 12,6^{\circ}\text{F}$$

39. A: kilograms

4 marks

Explanation:

Tonnes is used to measure anything larger than 1 000 kg, grams is used to measure small quantities such as ingredients in a recipe and milligrams is used to measure very small quantities.

This means that a reading of 83,7, measuring the mass of a human being, cannot be in the unit of milligrams, grams or tonnes.

40. false

2 marks

Explanation:

The number scale at the top of the plan reads as 1 : 20. That means for every 1 unit on the plan it is 20 of the same units in the actual classroom.

If it were measured as 25 cm, it means that the actual width is 500 cm. $25 \times 20 = 500$ cm

A number scale like this means that it is compared in the same units. It is therefore 500 cm and not 500 m.

Total: 140 Marks