

FLCM Dec2015

Foundational Learning

FL Mathematical Literacy

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|-------|-------|-------|
| 1) a | 21) c | 41) c |
| 2) a | 22) d | 42) c |
| 3) d | 23) c | 43) b |
| 4) d | 24) a | 44) a |
| 5) a | 25) d | 45) b |
| 6) a | 26) b | 46) c |
| 7) a | 27) c | 47) b |
| 8) a | 28) a | 48) a |
| 9) a | 29) d | 49) d |
| 10) c | 30) d | 50) c |
| 11) c | 31) a | 51) d |
| 12) c | 32) a | 52) d |
| 13) a | 33) a | 53) a |
| 14) d | 34) b | 54) a |
| 15) c | 35) b | 55) a |
| 16) d | 36) d | 56) a |
| 17) b | 37) d | 57) d |
| 18) c | 38) c | 58) a |
| 19) c | 39) b | 59) c |
| 20) d | 40) c | 60) d |

Question Number	Question Text	11/10/2015 - 12:12:05 pm
1) - (1)	Study the weather map showing temperatures in some of the cities of South Africa. Find the difference in temperature between Cape Town and Kimberley.	
2) - (2)	A group of miners travels in a lift from ground level to a depth of 1 950 m below the surface. The lift then takes them up to another level, travelling for 300 m. They make a second stop after travelling another 150 m towards the surface. They then get out of the lift. At what depth do they get out of the lift?	
3) - (3)	The analogue clock face below shows the time in the morning. What would the digital display be?	
4) - (4)	Human cells divide every 2 hours. How many cells will there be after 12 hours, expressed in its exponential form? Choose your answer from the options shown below.	
5) - (5)	Floor tiles are packed in boxes of 12. Each box cost R132,00 and boxes cannot be split. Onika needs 99 tiles. How much will Onika pay for the tiles she needs?	
6) - (6)	Tshidi took part in a swimming competition. The standing record for 100 metres freestyle was given as 3,48 seconds. She broke the record with a time of 3,42 seconds. What was her average time over a distance of 10 metres?	
7) - (7)	Maria is catering for a function. She bought 4 bottles of orange juice concentrate, each containing 5 litres. When she mixes it with water she uses the ratio 1 part orange to 7 parts water. How many litres of orange juice will she get once she has mixed all the juice?	
8) - (8)	Victoria is returning from Australia and has U\$ 9 584 dollars to change back to rand. The exchange rate at the time is $1\text{AU\$} = \text{R}9,2$ How much money, in rand, will she receive if the bank takes a 5% commission?	

9) - (9)

In a test at school, the teacher asked her class to work out the answer to the following sum:
two-fifths + three-eighths.

What is the correct answer?

10) - (10)

The Mr Soccer Sports Shop sells Jabulani soccer balls at R699,00 each.

If the ball loses its value by 5% each year, what will the selling price be in four years' time?

11) - (11)

Below is the payslip for Ms R Matjila for the month of October.

What is the Nett Pay that Ms Matjila receives?

12) - (12)

The table below shows the balance sheet of a small business during Jan, Feb and March.

What is the balance at the end of March?

13) - (13)

A factory worker is paid R215,50 per day. He works for eight weeks, including weekends, with no extra pay over weekends. The factory owner gives a bonus of R350 every four weeks.

How much does he earn at the end of eight weeks?

14) - (14)

Thabo sells pens and receives a commission of 80c for each pen that he sells.

How many pens must he sell to earn a commission of R20,80?

15) - (15)

Alex bought a new computer and printer costing R7 999 on hire purchase. He paid a deposit of R825 and was charged 19% p.a. simple interest on the balance.

He paid off his account, in equal monthly instalments, over 18 months.

How much did Alex pay per month?

16) - (16)

Kitson's electricity meter is read at the end of each month. His readings for three months are as follows:

January: 6 990 units

February: 7 346 units

March: 7 762 units

If each unit of electricity costs 93 cents, calculate the cost of Kitson's electricity usage for February and March.

17) - (17)

Muhau earns R8 250 per month. Her deductions for tax, pension and medical aid are 42% of her monthly earnings.

How much does Muhau have left after these deductions?

18) - (18)

Ernest takes the Johannesburg-Port Elizabeth train to visit his mother who lives in Cradock.

How long does the journey take from the Johannesburg station to the Cradock station?

19) - (19)

Johannes paid an amount of R4 250 for a fridge and a stove together. The stove costs R325,50 more than the fridge.

What is the price of the fridge?

20) - (20)

A plasma television, marked at a cash price of R7 500, can be bought on hire purchase. The hire-purchase contract is made up of a deposit of R3 125 and five equal monthly instalments of R1 250.

By what percentage is the hire purchase price more than the marked cash price?

21) - (21)

Thato has a small construction business in Thembisa. He is required to build a wall.

There are two ways to buy the bricks needed to build the wall:

(A) one by one, (B) a load of 1 000 or a combination of (A) and (B).

One brick cost R5,10. A load of 1 000 bricks costs R4 999,00.

Thato needs 5 150 bricks to build the wall. Calculate the total cost of bricks if he decides to use a combination of (A) and (B).

22) - (22)

The cash price for a stove is R1 500. Debbie bought the stove on credit. She paid R150 deposit plus R76,25 per month for 30 months.

How much more, over and above the cash price, did she pay for her stove?

23) - (23)

Study the cellphone rates and usage for Phindulo as shown below.

24) - (24)

Rob compares the cell phone charges of 2 cell phone networks on 120 calls in a month. He does a break-down as follows.

40% of calls made during off peak time.

35% of calls made during peak time.

25% of calls made during happy hour.

What is the difference in the charges between the two networks for the 120 calls?

(25) - (25) Joe decides to buy a new car. He puts down 20% deposit on a car advertised at R100 500,00 and pays off the balance over 60 months at R1 799,99 per month.

How much does he pay for the car in total?

(26) - (26) Palesa earns R18 000 gross income per month. Use the table shown below to answer the following question.

How much will she pay in annual tax for the year?

(27) - (27) The learners in the Numeracy class at Mtombeni Centre achieved the following marks in their test.

(28) - (28) The chart below shows the test scores for six students.

Determine the mode of this data.

(29) - (29) Maria and Cebo have moved to a new home in Gugulethu. There are 4 shops nearby and they want to find out which shop is the cheapest to buy their groceries. They drew up the following table of the prices of the main food items they would need to buy.

Which shop will be the cheapest for them to buy their main food items?

(30) - (30) Study the weather details for Johannesburg.

Which day has a forecast with the most clouds?

(31) - (31) The pie chart below indicates the TV programmes Susan watched over a period of six hours.

How long did she spend watching the Sport programmes?

(32) - (32) John scored the following marks out of 20 in each of five tests:
12 for Physical Science; 9 for English; 6 for Maths; 11 for Life Science and 7 for Accounting.

If a pie chart is drawn to represent these marks, what angle would be represented by Physical Science?

33) - (33)

In a survey of 3 000 people taken in 2009, researchers tested the HIV status of all the participants. The graph below shows these results.

Determine how many HIV negative males there were.

34) - (34)

Month 1 is January. During which month did the most people attend movies?

35) - (35)

The table below compares the results of two athletes who ran in the same 100 m race.

Choose the statement which correctly interprets the data given.

36) - (36)

A survey was conducted in the Goodwood Car Factory to find details about the home language of the workers. The results are shown in the table below.

What is the percentage of workers who speak isiXhosa in their homes?
Round off the answer to one decimal place.

37) - (37)

This chart shows how a municipality disposes of the waste material from their area. Two fifths of the waste is burnt.

Determine what percentage of the total waste is used for landfill.

38) - (38)

Steve is a competitor in an archery competition. He hit the bullseye on 4 of his last 20 shots.
What is the probability that he will hit the bullseye on his next shot?
The answer is simplified and written as a fraction.

39) - (39)

Daniel puts coins in a container as follows:

R2 coins with a value of R78,00

50c coins with a value of R54,00

R1 coins with a value of R53,00

What is the chance of him randomly taking out a 50c coin?

40) - (40)

John has a total of fourteen marbles of different colours in a bag. John lets his friend, Sam, choose 1 marble out of the bag.

What is the probability of Sam choosing a ball that is NOT blue?

41) - (41)

Alicia performs an experiment by spinning an arrow on a spinner. The spinner has four equal sections. The results of her experiment are shown in the table below.

Based on the data in the table, what is the *experimental* probability that the arrow will land on red?

Choose your answer from the options shown.

42) - (42)

Choose the correct value for Point Z on the ruler below:

43) - (43)

The diagram below shows a bathroom pane of glass.

What is the area of the pane?

44) - (44)

These two clock faces show different times during one afternoon.

What is the time difference, in minutes, between the first and second clock?

45) - (45)

What is the difference between the maximum and minimum temperatures as shown on the thermometer below?

46) - (46)

Siyabonga is a florist and has a garden patch with a length of 8 m by a width of 6 m. She wants to buy a bigger piece of land. Each side must be a square of the one she has already.

Find the area of the piece of land she would like to buy.

47) - (47)

Hendrik has a container with 4 200 millilitres of water.

How many litres of water are in Hendrik's container?

48) - (48)

A car used 9,3 litres of petrol for each 100 km travelled. A trip of 300 km was started with 45 litres of petrol in the tank.

How much petrol remained in the tank at the end of the trip?

49) - (49)

How many litres of water will fill a container with the dimensions shown in the diagram below?

50) - (50)

Which of the following shapes has six square faces?

51) - (51)

Sphumlile draws a triangle on a piece of paper and enlarges it on a photocopier. Triangle A is the original and Triangle B is the enlargement.

Determine the length of the side (i)

52) - (52) Two joggers run 8 km north and then 5 km west. What is the shortest distance, to the nearest tenth of a kilometre, they must travel to return to their starting point?

53) - (53) Given below is a diagram of the flag of South Africa with a length of 390 mm and a breadth of 260 mm.

Find the diagonal length in centimetres.

54) - (54) Identical cubes are stacked as shown in the figure below. The pile is 5 cubes high.

Which figure will you see from the left side of the pile?

55) - (55) Study the map below and then find the statement that is true from the options given.

56) - (56) On this map of South Africa, the lines of latitude and longitude have been drawn at 5° intervals.

Bonny wants to give the position of Johannesburg to an overseas friend, using lines of latitude and longitude.

Choose the correct option that best estimates the position of Johannesburg using degrees of latitude and longitude.

57) - (57) Poles are used to make up sections of a fence. The diagram shows three sections.

The table below the diagram shows the number of poles needed for one, two and three sections of the fence.

How many poles will be needed to make six sections of the fence?

58) - (58) Study the pattern below and choose the shape from the options given that would replace B in the pattern.

59) - (59) Johannes has to paint the living room walls with the following dimensions: 3 m high with a total wall length of 18 m (allowing for doors and windows). The paint he purchases has a spreading rate of 11 m^2 per litre. He will apply 2 coats of paint. The paint costs R210 per 5 litre tin.

How much will he have to pay for the paint required? Give your answer to the nearest Rand.

Question Number
60) - (60)

11/10/2015 - 12:12:05 pm

Question Text
David and Patrick played a game by throwing two six-sided dice at the same time.

What is the probability that the total score on any one throw is more than 8?