



Province of the  
**EASTERN CAPE**  
EDUCATION

## **INTERMEDIATE PHASE**

**GRADE 6**

**NOVEMBER 2014**

**MATHEMATICS**

**MARKS:** 75

**TIME:** 1½ hours

**NAME:** \_\_\_\_\_



\_\_\_\_\_  
This question paper consists of 14 pages.  
\_\_\_\_\_

**INSTRUCTIONS TO THE LEARNER**

1. Read ALL the instructions carefully.
2. QUESTION 1 consists of 10 multiple-choice questions. Circle the letter of the correct answer.
3. Answer QUESTIONS 2 to 25 in the spaces or frames provided.
4. All working must be done on the question paper and not on rough work pages.
5. The test counts 75 marks.
6. The test duration is 1½ hours.
7. The teacher will lead you through the practice exercise before you start the test.
8. You may NOT use a calculator.

**PRACTICE EXERCISE**

Circle the letter of the correct answer.

$$5 \times 7 = \dots$$

- A 57
- B 75
- C 35
- D 53

You have answered correctly if you have circled (C) above.

**NOTE:**

- You will answer more questions like the one you have just completed.
- Do your best to answer each question even if you are not sure of the answer.
- Write down the answer that you think is the best and move to the next question.
- When you have answered all the questions on a page, move to the next page.
- Look only at your own work.

**THE TEST STARTS ON THE NEXT PAGE.**

1. Circle the letter of the correct answer.

1.1 Which number consist of:

$$9t + 4U + 8T + 5H + 6h$$

- A 948,56
- B 584,96
- C 548,69
- D 546,89

(1)

1.2 Round 5 687 off to the nearest 5.

- A 5 685
- B 5 700
- C 5 690
- D 5 600





(1)

1.3 What number is three million more than 345 678 901 is?

- A 645 678 901
- B 375 678 901
- C 348 978 901
- D 348 678 901

(1)

1.4 Which ONE of the following geometrical shapes has only one line of symmetry?

- A 
- B 
- C 
- D 

(1)

1.5 Xola wrote this pattern on the board.

$$3 ; 6 ; \underline{\quad} ; \underline{\quad} ; 48$$

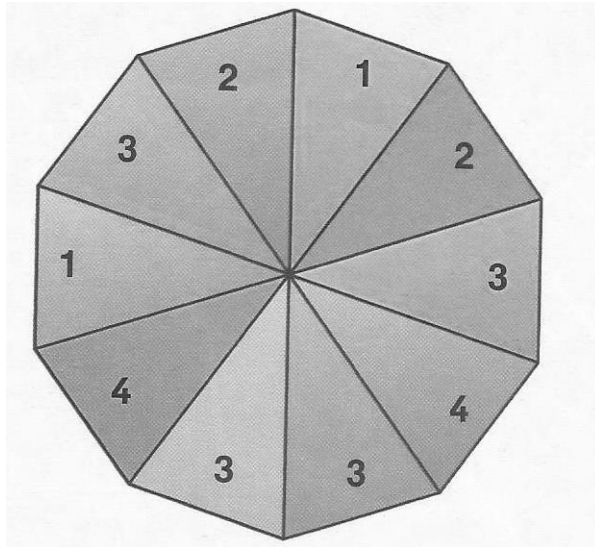
Which numbers will fit in the open spaces, if the pattern stays the same?

- A 12 ; 24
- B 9 ; 15
- C 9 ; 24
- D 12 ; 20

(1)

1.6 Consider the spinner and answer the following question.

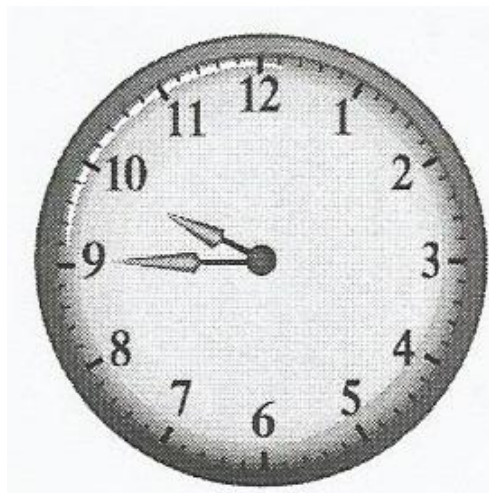
Which number are you most likely to get if you spin the spinner?



- A 1
- B 2
- C 3
- D 4

(1)

1.7 Which one will match the time on the clock with the time below in words?



- A Nine minutes past ten
- B Ten minutes past nine
- C Quarter to nine
- D Quarter to ten

(1)

1.8 How many millilitres of water are in the jug?



- A 125 ml
  - B 125 litres
  - C 125 kl
  - D 150 ml
- (1)

1.9 A farmer has 6 chickens. Each chicken has 7 chicks. How many chicks are there altogether?

- A 13
  - B 24
  - C 42
  - D 67
- (1)

1.10 Fill in the correct operation signs below to make the following number sentence true:

$$6 * 5 * 5 = 35$$

- A x ; +
  - B x ; -
  - C + ; ÷
  - D - ; +
- (1)

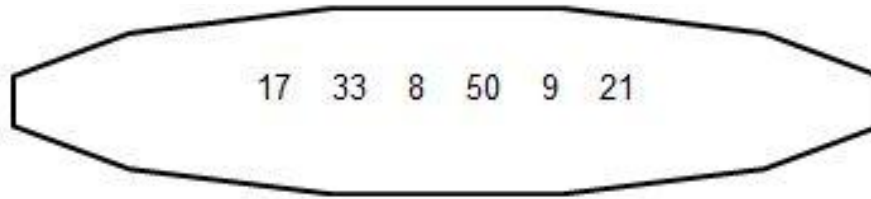
2. Write the number below in digits.

Seventeen million seven hundred and fifty five thousand one hundred and forty two.

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(1)

3. Choose one number out of the following set of numbers that fits each of the descriptions below.



- 3.1 A prime number: \_\_\_\_\_ (1)
- 3.2 A multiple of 10: \_\_\_\_\_ (1)
- 3.3 A factor of 27: \_\_\_\_\_ (1)
- 3.4 A number divisible by 5: \_\_\_\_\_ (1)

4. What is the value of the underlined digit in 82 394 782?  
\_\_\_\_\_ (1)

5. Twenty articles cost R120 and are sold for R7,50 each. Calculate the total profit.  
\_\_\_\_\_ (2)

6. Arrange the following common fractions in ascending order of size using the symbol ">."
- $$\frac{58}{100} ; \frac{9}{10} ; \frac{57}{100} ; \frac{6}{10}$$
- \_\_\_\_\_ (1)

7. Find the value of  $x$  in the following:
- $$x \div 4 = 36 \div 3$$
- $x =$  \_\_\_\_\_ (1)

8. Calculate:
- $$37,58 \times 10 =$$
- \_\_\_\_\_ (1)

9. Calculate the answers for QUESTIONS 9.1 to 9.5.

$$9.1 \quad 48\,132\,975 + 1\,639\,201 =$$

(2)

$$9.2 \quad 438\,301 - 139\,574 =$$

(2)

$$9.3 \quad 23\,478 \times 425 =$$

(4)

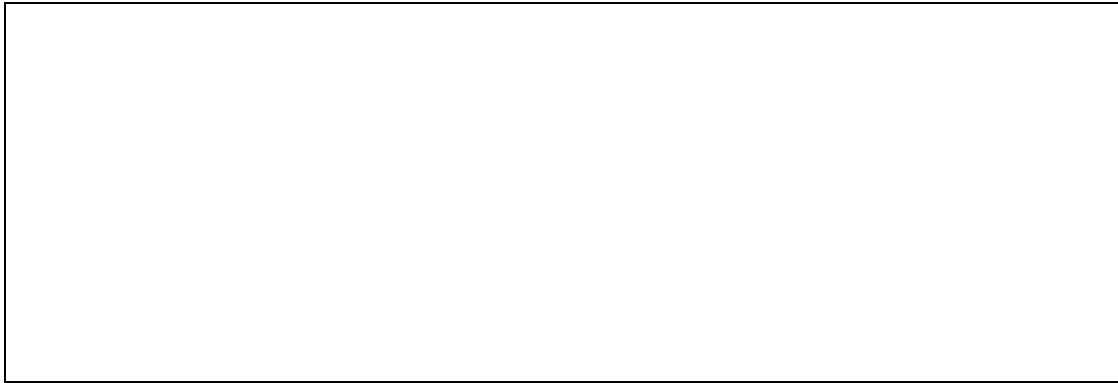
$$9.4 \quad 4\,140 \div 115 =$$

(3)

$$9.5 \quad 2\frac{1}{4} + 3\frac{1}{3} + 2\frac{1}{12} =$$

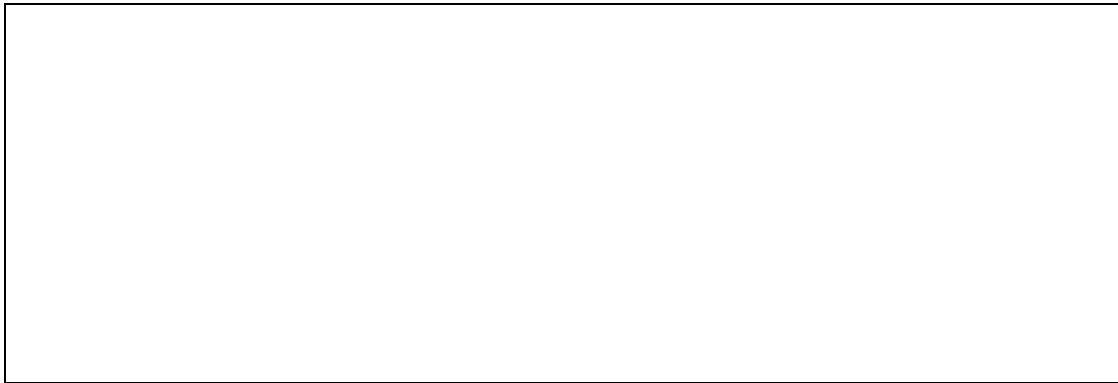
(3)

10. John divided a certain number by 17. He found an answer of 325 with a remainder of 4. What is the number?



(3)

11. Paul has an empty suitcase weighing 200 g. He packs 7 parcels in it, with each parcel having a mass of 800 g. Find the total mass of the packed suitcase in kilograms.



(3)

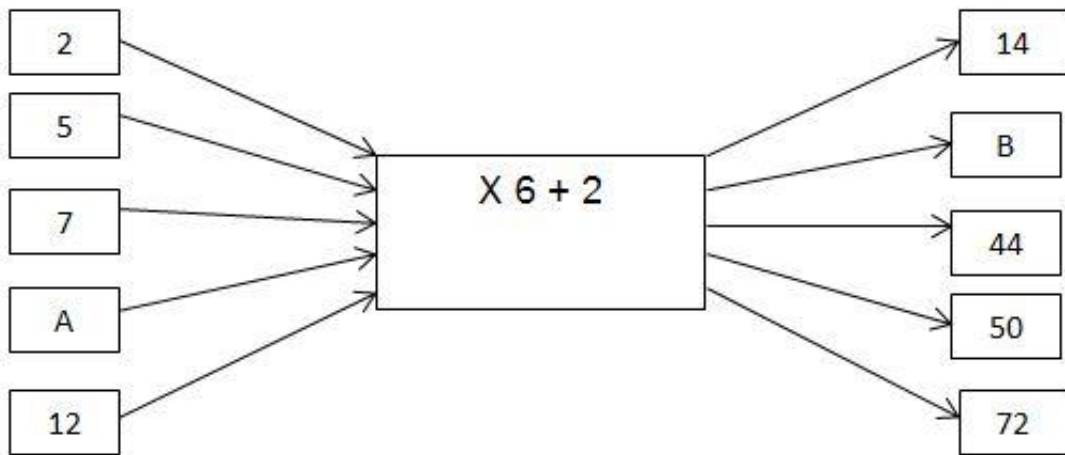
12. Twenty learners wrote a test. The ratio of the learners who passed to the learners who failed is 3 : 2. How many learners passed the test?



(2)

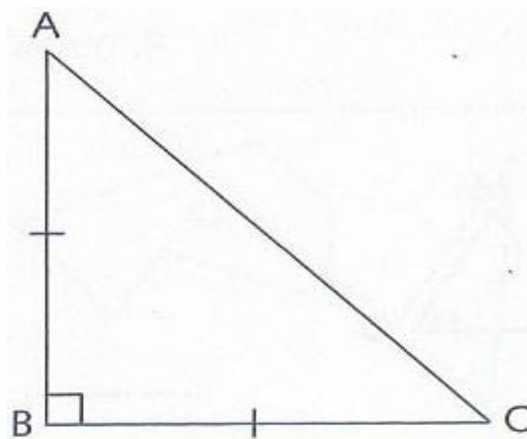


13. Complete the flow diagram.



A = \_\_\_\_\_ B = \_\_\_\_\_ (2)

14. Study the following 2D-shape.



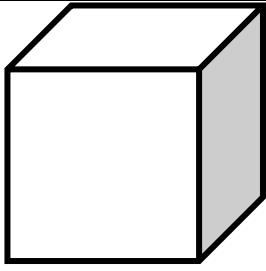
14.1 Give the name of the above triangle.  
\_\_\_\_\_ (1)

14.2 Name angle B.  
\_\_\_\_\_ (1)

14.3 If side  $\overline{AB}$  above is 6 cm long, how long will side  $\overline{BC}$  be?  
\_\_\_\_\_ (1)

14.4 If the perimeter is 20 cm, how long is  $\overline{AC}$ ?  
\_\_\_\_\_ (1)

15. Complete the table below:

|                     |  |
|---------------------|--|
|                     |  |
| Name the 3D shape.  | 15.1.  |
| Number of faces.    | 15.2.  |
| Number of vertices. | 15.3.  |

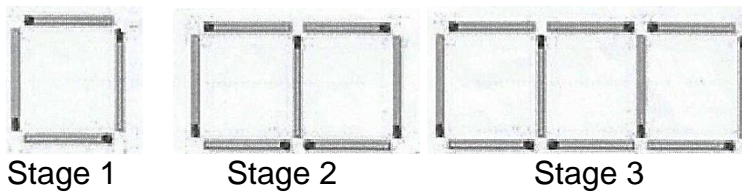
(3)

16. How many minutes and seconds are left on the watch before 11 o'clock strikes?



(1)

17. Study the following geometric pattern below and complete the table below. All the stages form a pattern (sameness).



17.1 How many matches do we need?

|                          |   |   |    |    |    |    |     |
|--------------------------|---|---|----|----|----|----|-----|
| Number of squares        | 1 | 2 | 3  | 4  | 5  | 30 |     |
| Number of matches needed | 4 | 7 | 10 | 13 | 16 | 91 | 151 |

(1)

17.2 Describe the rule in your own words.

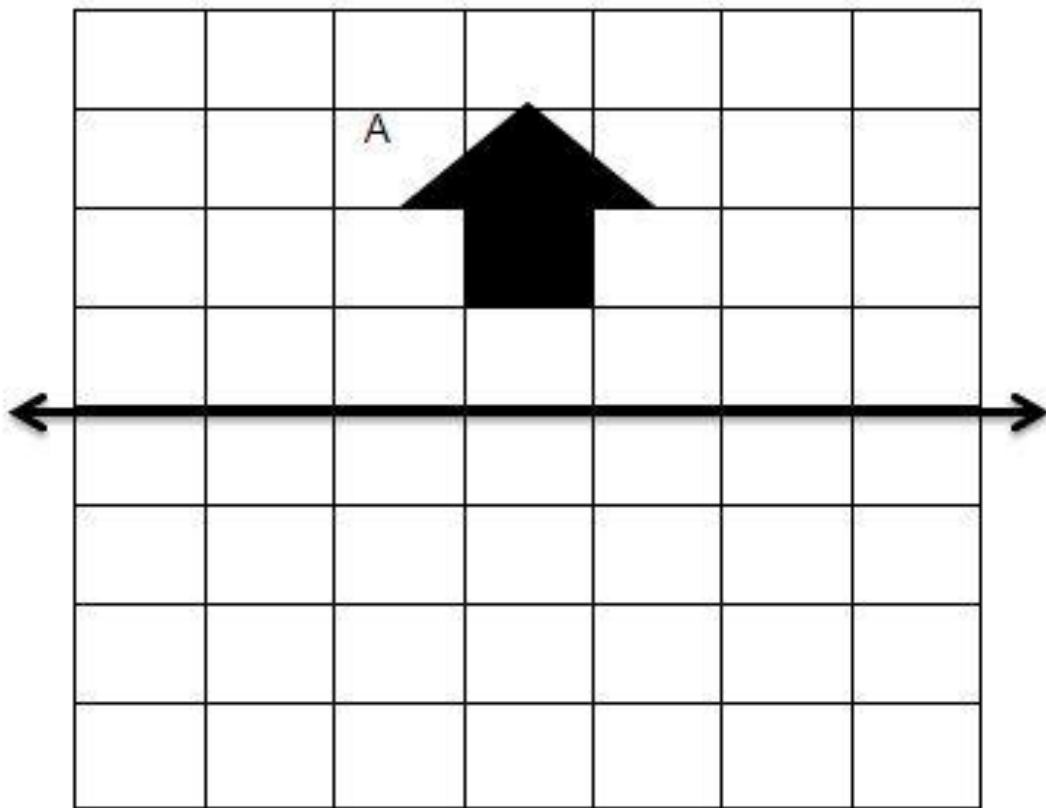
(1)

18. Complete the table below:

| Common Fraction | Decimal Fraction | Percentage |
|-----------------|------------------|------------|
| $\frac{1}{2}$   | 0,5              | 50%        |
| $\frac{7}{10}$  |                  |            |
| $\frac{3}{4}$   |                  |            |





(4)

19. Draw the reflection of shape A in the square below.



(1)

20. Read the time on the world clocks and answer the following questions.

|   |   |  |   |
|---|---|--|---|
|  |  |  |  |
| South Africa  | India   | New York   | China   |
| Friday 09:44 pm   | Friday 08:15 am   | Friday 09:44 pm  | Friday 10:44 pm   |

20.1 What is the time difference between South Africa and India?

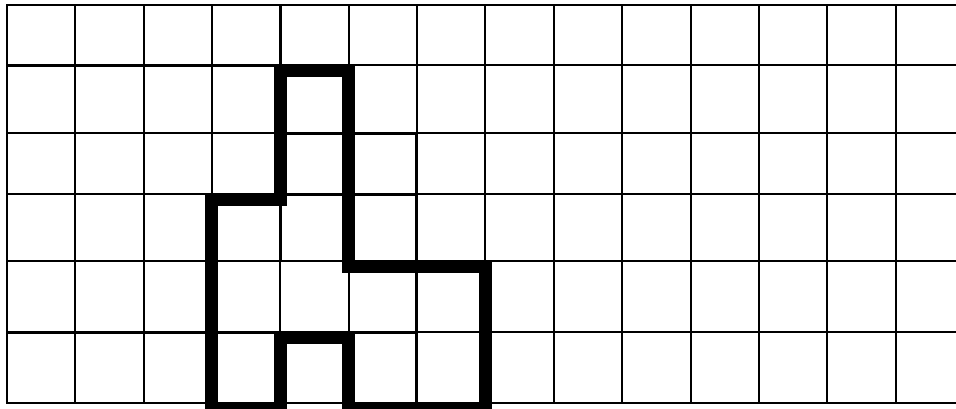
\_\_\_\_\_ (2)

20.2 If it is 08:44 pm in New York, which day and time will it be in China?

Day: \_\_\_\_\_ Time: \_\_\_\_\_ (2)

21. The side of each square is 2 m long.

Calculate the AREA of the shape drawn below.



Area =

22. The information below is the shoe sizes of some Grade 6 learners.

|   |   |   |
|---|---|---|
| 4 | 2 | 5 |
| 8 | 3 | 5 |
| 5 | 4 | 3 |

22.1 How many Grade 6 learners took part in the survey?

\_\_\_\_\_ (1)

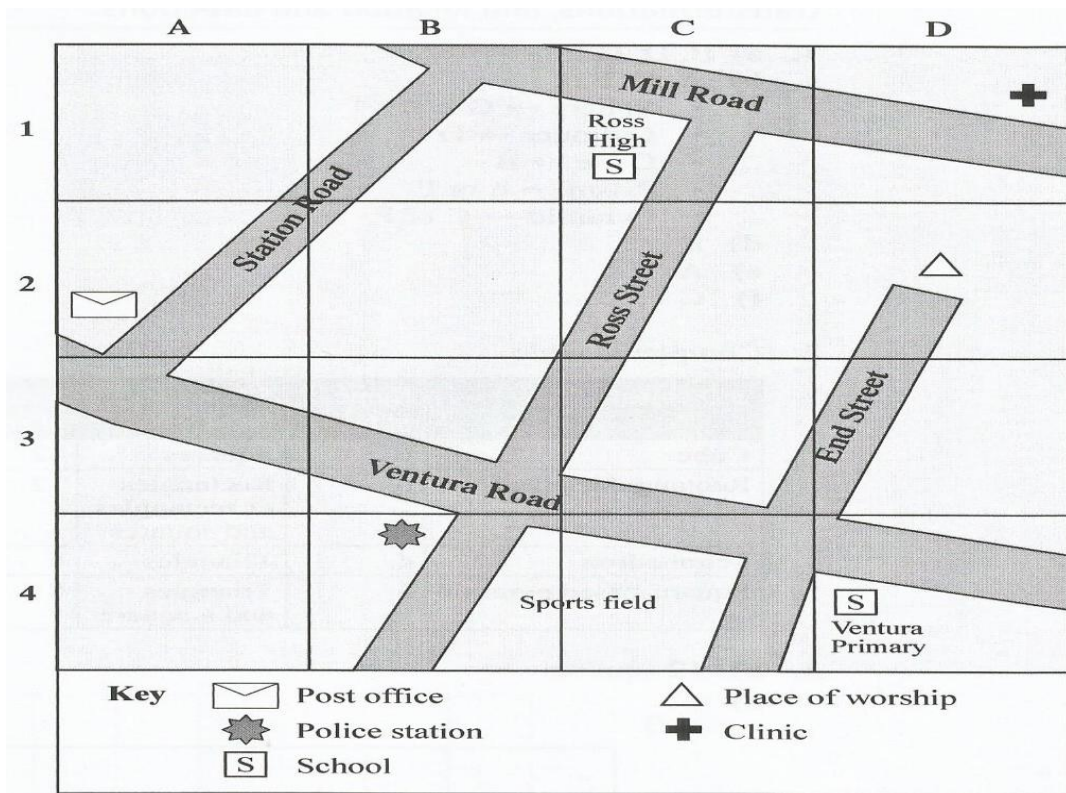
22.2 Calculate the mode of the data.

\_\_\_\_\_ (1)

22.3 Calculate the median of the data.

\_\_\_\_\_ (1)

23. Look at the map below and answer the questions.



23.1 In which block will you find the Post Office?

\_\_\_\_\_ (1)

23.2 Which place will you find in block D4?

\_\_\_\_\_ (1)

24. Study the following table and answer the question below.

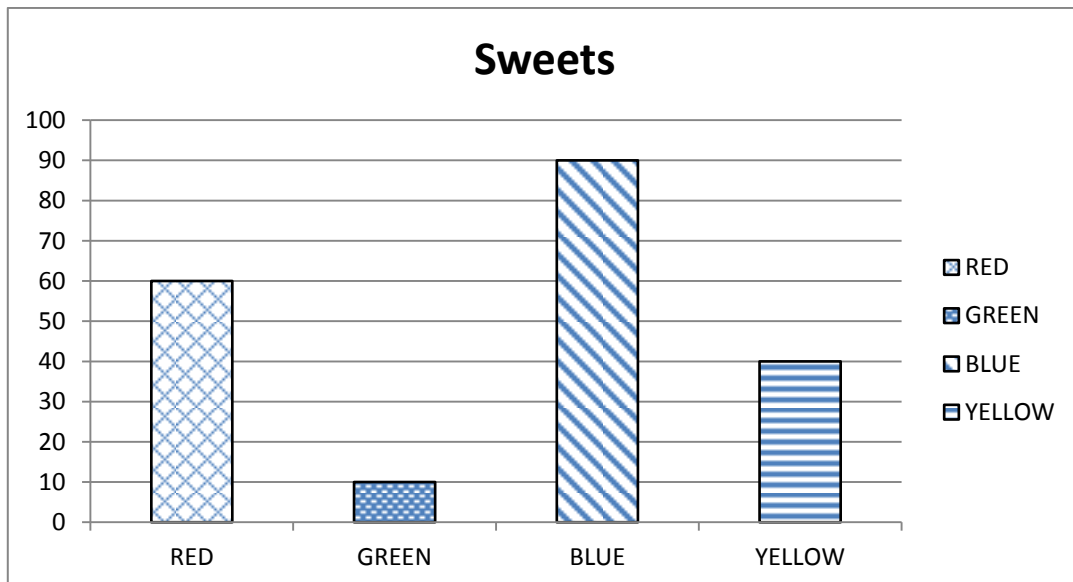
| LEARNERS WHO WERE ABSENT |  |
|--------------------------|--|
| Tuesday                  | Devan, Piet, Xola, Marlise, Siphosihle               |
| Wednesday                | Sheldon, Jannie, Sara, Zola, Xhanti, Willem, Cheteem |
| Thursday                 | Caleb, Mohammed, Clement                             |

Use the above information to complete the table below:

| Day       | Tallies | Number of learners |
|-----------|---------|--------------------|
| Tuesday   | ++++    | 5                  |
| Wednesday |         | 7                  |
| Thursday  |         | 4                  |

(1)

25. Look carefully at the bar graph and then answer the questions below.



25.1 What is the total number of sweets?

\_\_\_\_\_

(1)

25.2 What percentage of the total does the combined Green and Blue sweets represents?

\_\_\_\_\_

(1)

25.3 Construct a common fraction, in its simplest form, for the Green sweets.

\_\_\_\_\_

(1)

**TOTAL: 75**



