



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

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GRADE 3

MATHEMATICS EXEMPLAR QUESTIONS

This booklet consists of 24 pages, excluding the cover page.

GUIDELINES FOR THE USE OF ANA EXEMPLAR QUESTIONS

1. How to use the exemplar questions

While the exemplar questions for a grade and a subject have been compiled into one comprehensive set, **the learner does not have to respond to the whole set in one sitting. The teacher should select exemplar questions that are relevant to the planned lesson at any given time.** Carefully selected individual exemplar questions, or a manageable group of questions, can be used at different stages of the teaching and learning process as follows:

- 1.1 At the beginning of a lesson as a diagnostic test to identify learner strengths and weaknesses. The **diagnosis** must lead to prompt **feedback** to learners and the development of **appropriate lessons** that address the identified weaknesses and consolidate the strengths. The diagnostic test could be given as homework to save instructional time in class.
- 1.2 During the lesson as short formative tests to assess whether learners are developing the intended knowledge and skills as the lesson progresses and ensure that no learner is left behind.
- 1.3 At the completion of a lesson or series of lessons as a summative test to assess if the learners have gained adequate understanding and can apply the knowledge and skills acquired in the completed lesson(s). Feedback to learners must be given promptly while the teacher decides on whether there are areas of the lesson(s) that need to be revisited to consolidate particular knowledge and skills.
- 1.4 At all stages to expose learners to different techniques of assessing or questioning, e.g. how to answer multiple-choice (MC) questions, open-ended (OE) or free-response (FR) questions, short-answer questions, etc.

While diagnostic and formative tests may be shorter in terms of the number of questions included, the summative test will include relatively more questions, depending on the work that has been covered at a particular point in time. It is important to ensure that learners eventually get sufficient practice in responding to the exemplar questions.

2. Memoranda or marking guidelines

A typical example of the expected responses (marking guidelines) has been given for each exemplar question and for the ANA model test. Teachers must bear in mind that the marking guidelines can in no way be exhaustive. They can only provide broad principles of expected responses and teachers must interrogate and reward acceptable options and variations of the acceptable response(s) given by learners.

3. Curriculum coverage

It is extremely critical that the curriculum must be covered in full in every class. The exemplar questions for each grade and subject do not represent the entire curriculum. They merely **sample** important knowledge and skills and covers work relating to terms 1, 2 and 3 of the school year.

Circle the letter of the correct answer for all multiple choice questions.

1.1 Numbers arranged from the smallest to the greatest are ...

- A 53 , 17 , 59 , 95 , 35
- B 59 , 17 , 95 , 35 , 53
- C 95 , 59 , 53 , 35 , 17
- D 17 , 35 , 53 , 59 , 95

1.2 Arrange these numbers from the greatest to the smallest.

- A 125, 521, 251, 215
- B 251, 215, 125, 521
- C 521, 251, 215, 125
- D 125, 215, 251, 521

1.3 Arrange the given numbers from the greatest to the smallest.

533 , 137 , 539 , 935 , 335

1.4 Arrange these numbers from the smallest to the greatest.

30, 27 , 64 , 51, 24 , 99

2.1 607 broken down is ...

A $70 + 600 + 60$

B $7 + 60 + 60$

C $600 + 7$

D $700 + 6 + 70$

2.2 Break down 760.

_____ + _____

2.3 67 broken down is ...

A $70 + 60 + 6$

B $7 + 60$

C $600 + 7$

D $700 + 6 + 60$

3.1 39 doubled is ...

A 69

B 79

C 78

D 96

3.2 $59 \times 2 =$

A 181

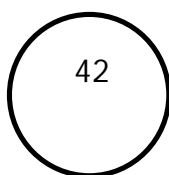
B 118

C 1018

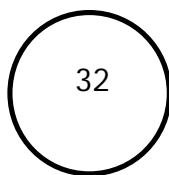
D 169

3.3 Tick the circle with 26 doubled.

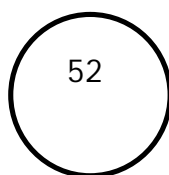
a.



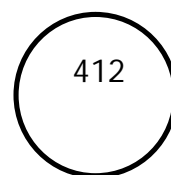
b.



c.



d.



4.1 642 rounded off to the nearest 10 is...

A 700

B 655

C 640

D 600

4.2 What will the answer be if 462 is rounded off to the nearest 10?

A 624

B 426

C 246

D 460

4.3 266 rounded off to the nearest 10 = _____

5.1 9.50 a.m. on an analogue clock shows that the time is:

A ten past ten in the evening.

B ten past ten in the morning.

C ten to ten in the evening.

D ten to ten in the morning.

5.2 9.50 p.m. on an analogue clock shows that the time is:

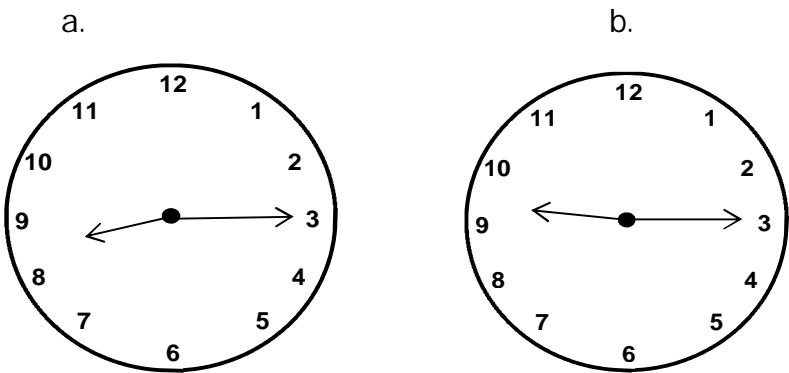
A ten past ten in the evening.

B ten past ten in the morning.

C ten to ten in the evening.

D ten to ten in the morning.


5.3 Tick the clock that shows 9.15 a.m. on an analogue clock.





6.1 Fractions arranged from smallest to greatest are ...

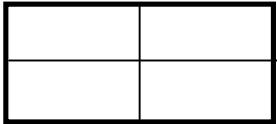
- A 1 quarter, 1 half, 1 fifth, 1 third
- B 1 half, 1 third, 1 quarter, 1 fifth
- C 1 third, 1 fifth, 1 quarter, 1 half
- D 1 fifth, 1 quarter, 1 third, 1 half

6.2 Number these fractions from the greatest to the smallest

a. 

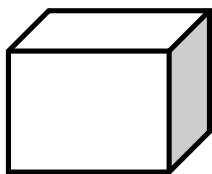
b. 

c. 

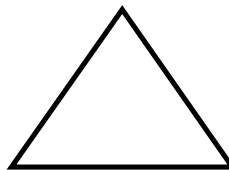
d. 

7.1 Write the name of the given 3-D object and 2-D shape.





a.



b.

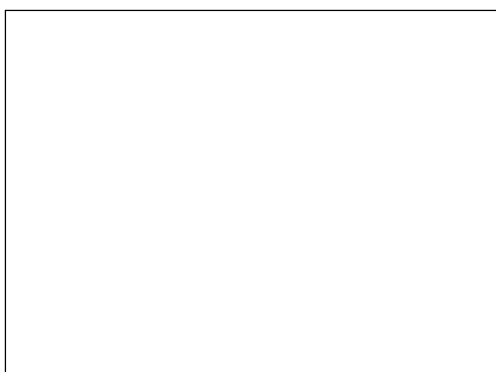


7.2 Match each 3-D object and 2-D shape to the correct word.

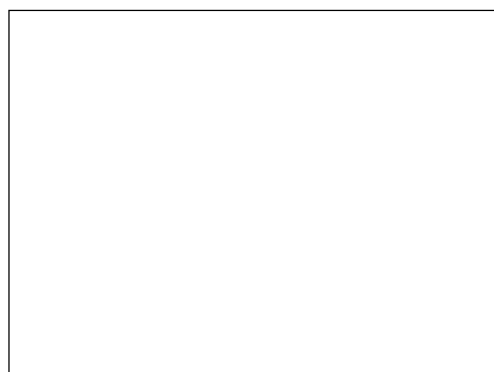
	Triangle
	Cube
	Rectangle
	Cylinder

7.3 Draw in the boxes.

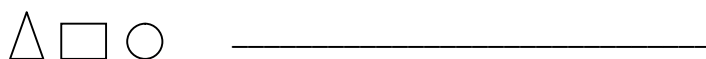
a. Any 2-D shape



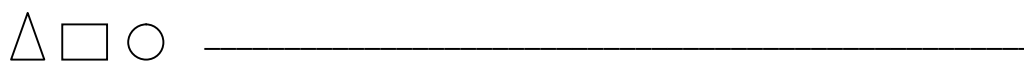
b. Any 3-D object



8.1 Extend the pattern below once more.



8.2 Extend the pattern twice.



8.3 Extend the 'growing' pattern below once more.

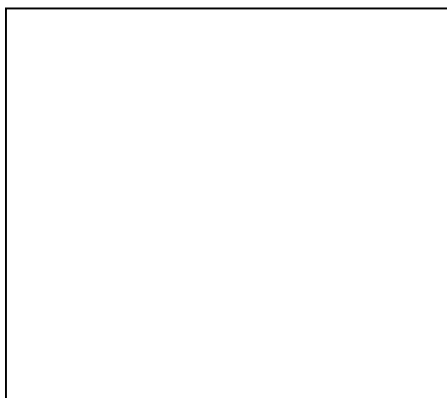


9.1 Use the "breaking-down" method to calculate each of the following:

a. $689 - 237$



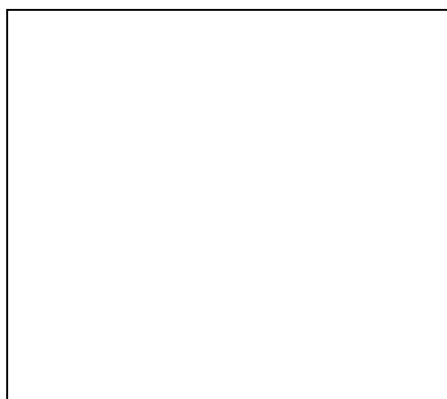
b. $382 + 416$



c. $39 \div 3$



d. 23×2

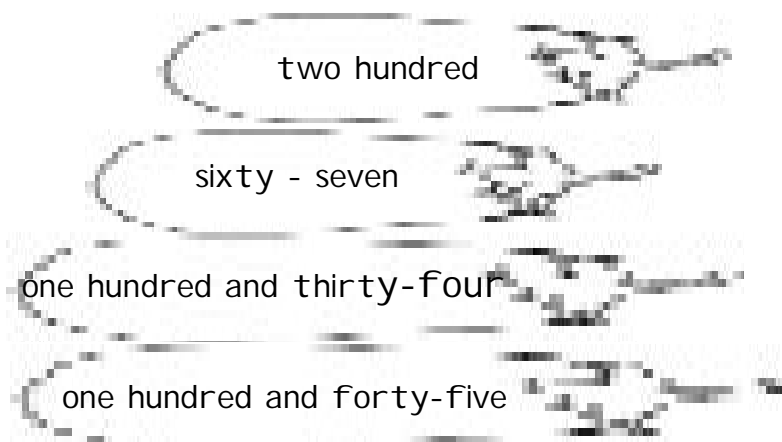
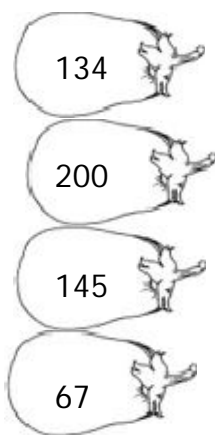


10. Complete each of the following number patterns:

- a. 122; ____; 162; ____; 202; ____; ____.
- b. 475; 450; 425; ____; ____; ____; ____.
- c. 173; 172; 171; ____; ____; 168; 167; ____.
- d. 195; 190; ____; ____; 175; ____; 165.

11.1 Write down the number name for 468.

11.2 Match the number symbol to the number name.



11.3 The number name for 754 is ...

- A Seven hundred and forty-five
- B Five hundred and fifty-four
- C Four hundred and seventy-five
- D Seven hundred and fifty-four

11.4 Write down the number symbol for three hundred and nine.

11.5 The number symbol for six hundred and ninety-eight is ...

- A 986
- B 869
- C 698
- D 689

11.6 Write down the number symbol for ...

a. One hundred and ninety-nine: _____

b. Seventy-eight: _____

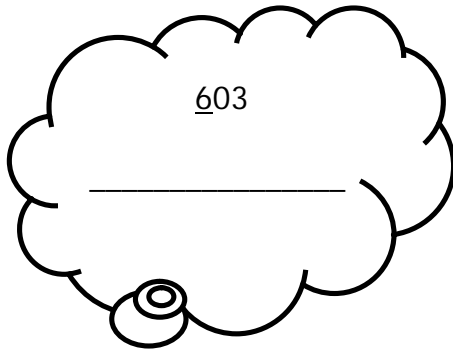
12.1 Write down the value of the underlined digit in the number 754

12.2 Write down the place value of the underlined digit.

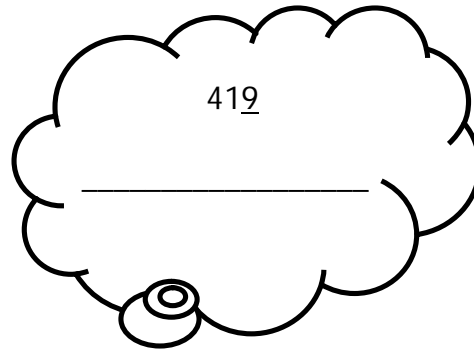
a. 456 _____

b. 374 _____

12.3 The value of the underlined digit in the clouds are?



a.



b.

13.1 Write the number below in the shortest form.

$$5 + 600 = \underline{\hspace{2cm}}$$

13.2 Build up the following numbers.

a. $100 + 80 + 9 = \underline{\hspace{2cm}}$

b. $100 + 100 + 0 + 0 = \underline{\hspace{2cm}}$

c. $40 + 30 + 2 + 1 = \underline{\hspace{2cm}}$

13.3 Break down following numbers.

a. $136 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

b. $36 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

14.1 Complete the number sequence.

a. 412; 410 ; 408 ; ____ ; ____ ; ____ ; ____

b. 123; 126; 129, ____ ; ____ ; ____ ; ____ .

14.2 The rule of counting forwards in 4s and 20s is used in the sequence patterns below.

Fill in the missing numbers and write the rule used.

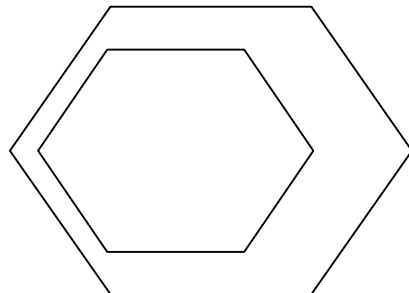
a. 810; 830; 850; 870; ____; ____; ____; ____.

Rule _____

b. 380; 384; 388; 392; ____; ____; ____; ____.

Rule _____

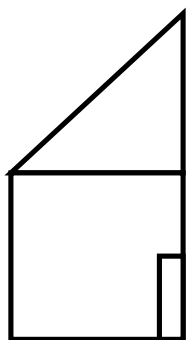
15.1 Draw a line of symmetry.



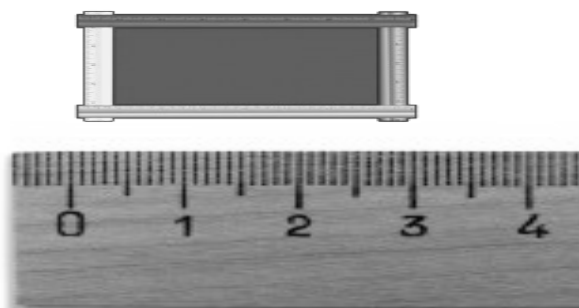
15.2 Draw a line of symmetry.



15.3 Draw the other half of the house.



16.1 What is the length of the picture below?

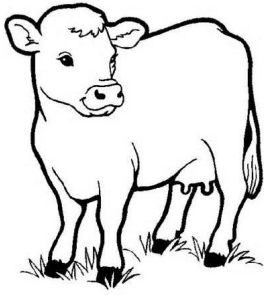


_____ cm

16.2 Circle the correct word in the brackets.

- a. I am 7 (gram, centimetres, litres) taller than my friend.
- b. I weigh more than 15 (kilograms, metres, millilitres).
- c. Father fills his car with 50 (millimetres, grams, litres) of petrol.

17.1 Circle the correct word in the brackets.



- a. The mass of the cow is measured in (kilograms, centimetres).



- b. The capacity of the cup of coffee is measured in (metres, millilitres).

17.2 Complete:

If one bottle of cool drink fills four glasses then

- a. 2 bottles fill _____ glasses.
b. 5 bottles fill _____ glasses.
c. _____ bottles fill 40 glasses.
d. _____ bottles fill 12 glasses.

17.3 Arrange the following capacities from the smallest to the greatest.

500 *ml*, 5 *ml*, 1 *l*, 250 *ml*

_____, _____, _____, _____.

18. Show all calculations for the following word sums.

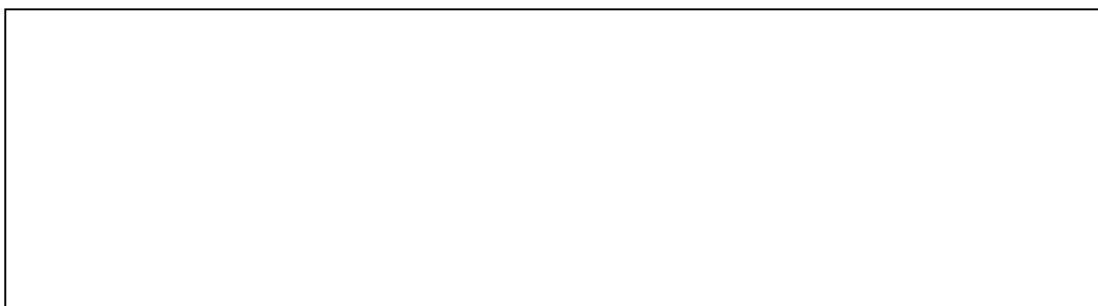
18.1

Three boys and two girls each have a tricycle. How many wheels do their tricycles have altogether?



18.2

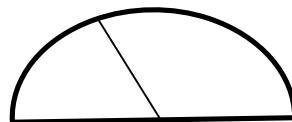
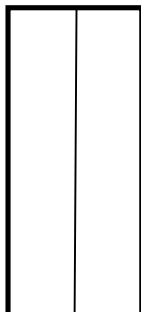
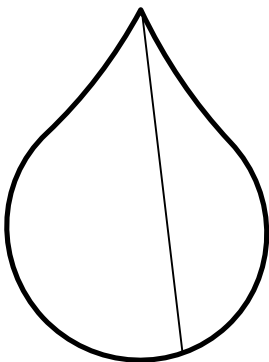
Teacher has 45 sticks of chalk. She was given another 40 sticks. She then shared the chalk equally amongst four of her learners. How many sticks of chalk did each of the learners get and how many were left?



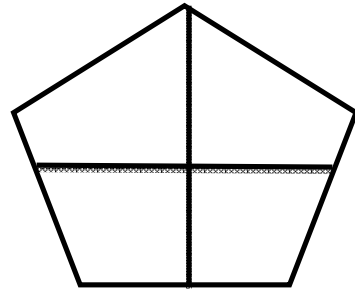
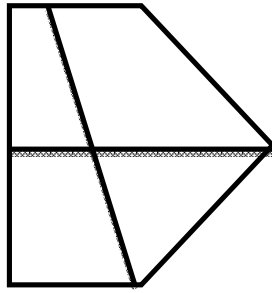
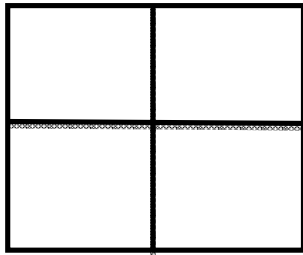
- 18.3 Donald has ninety nine lollipops and wants to share them equally amongst his three nephews. How many lollipops will each nephew get?

- 18.4 Bob collected 138 glass bottles for a recycling project. 22 of them broke. How many bottles did not break?

- 19.1 Circle the shape that is divided into half?

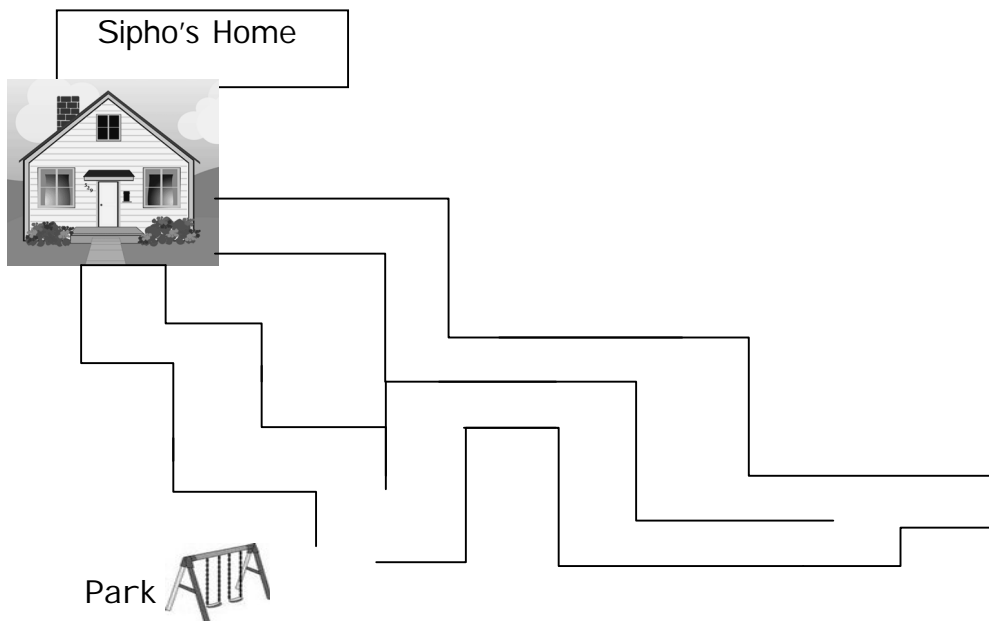


19.2 Colour the shape that is divided into quarters



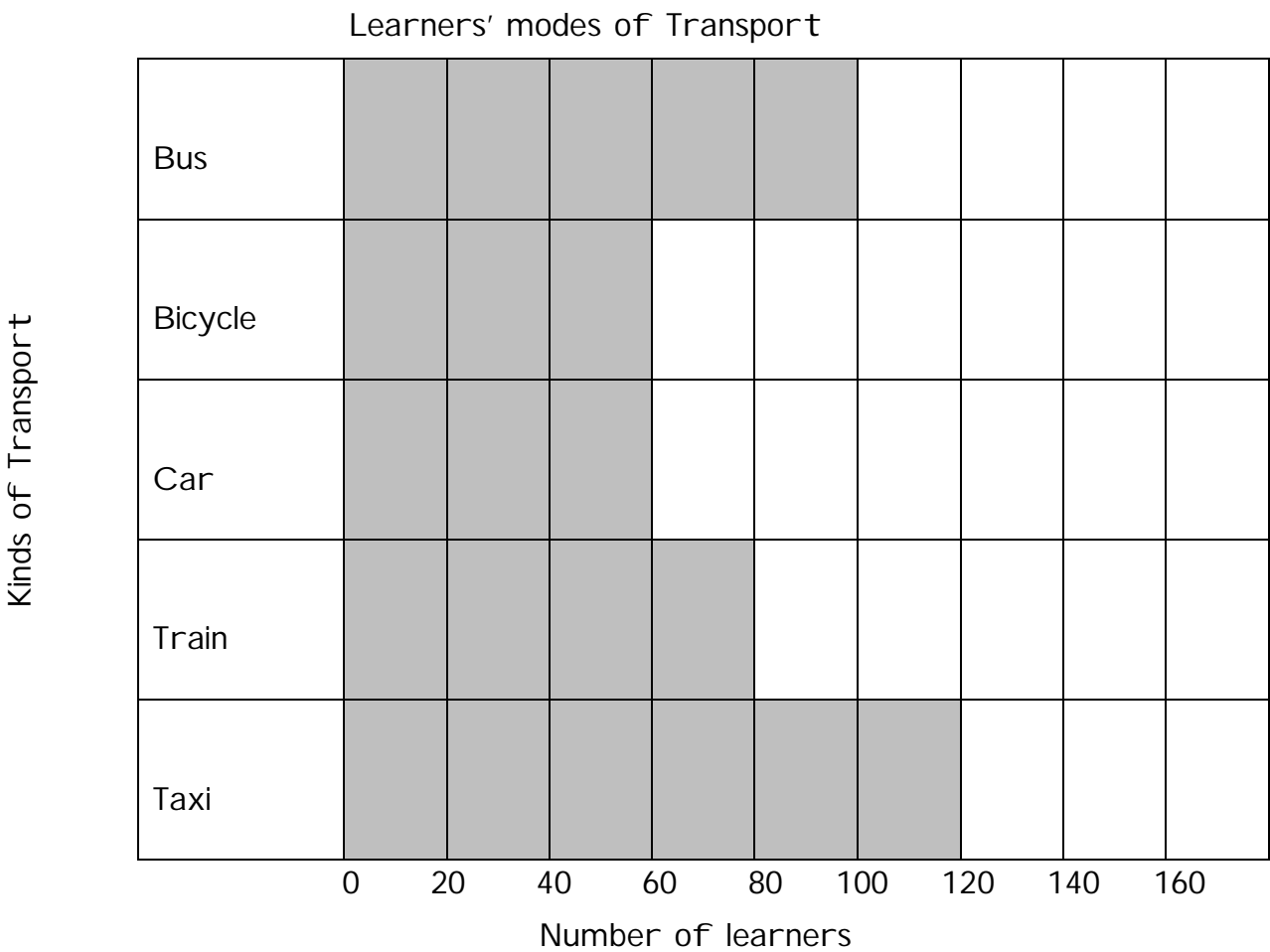
20.1 Siphso walks out of the front door of his house and turns left to walk to the park.

Draw arrows on the diagram showing the paths he used.



20.2 How many left turns did Sipho make before he reached the park?

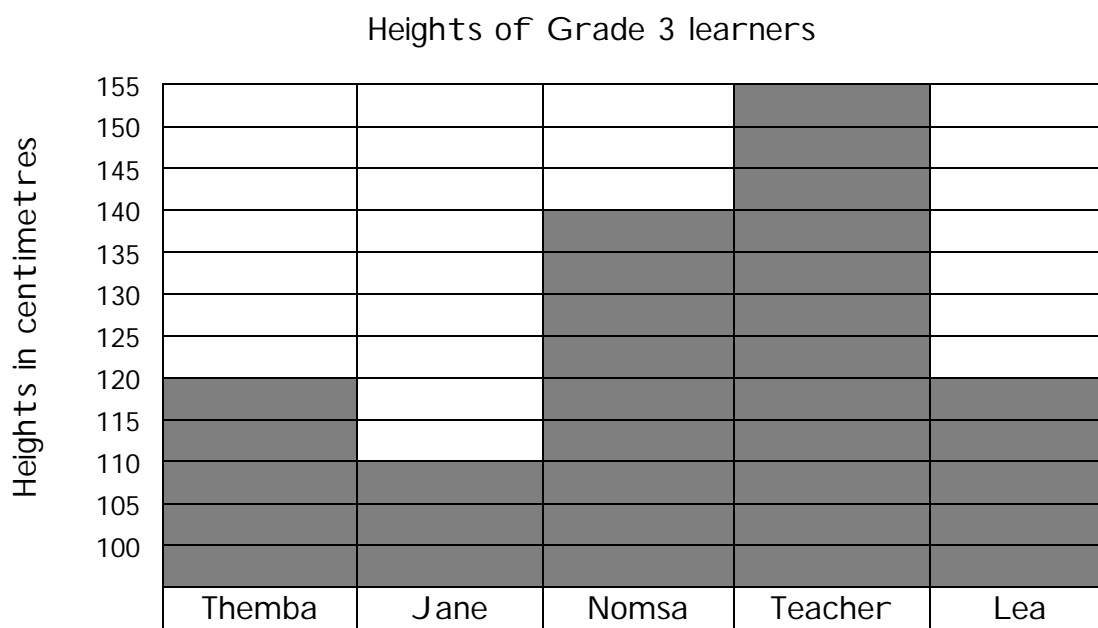
21.1 Study the graph and answer the questions that follow.



a. How do most of the learners come to school?

b. How many more learners come to school by bus than by car?

21.2 Study the graph and answer the questions that follow questions.



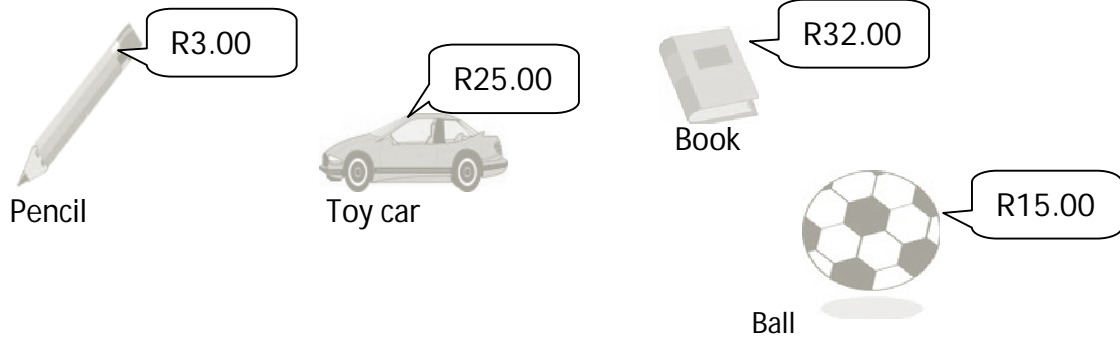
a. Who is the shortest in the class?

b. What is the difference between the Teacher's height and Nomsa's height?

c. Which learners have the same height?

d. If Jane stood on Themba's head, what would their combined height be?

- 22.1 Look at the prices of the articles and answer the questions that follow.



- a. Which three articles can you buy for exactly R50?
- _____
- b. If you buy the ball and pay with R50, how much change will you get?
- _____
- c. How much more does a book cost than a ball?
- _____

22.2 Use the menu to answer the following question.

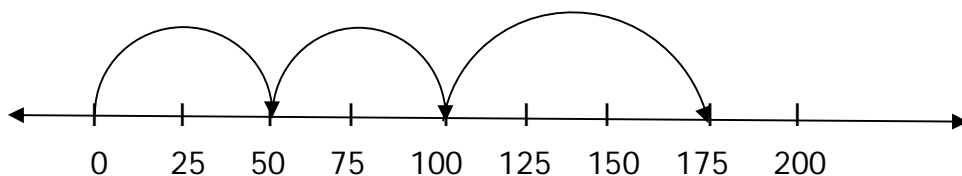
Chick Chick's Take Away Menu	
2 Drum sticks	R10,00
4 Chicken wings	R25,00
Chicken burger	R15,50
Cup of chicken soup	R9,95

- a. How much did 2 burgers and a cup of soup cost Beauty?
- _____
- b. How much change did Beauty get if she paid with a R50,00 note?
- _____
- c. How much change will you get from R60,00 if you buy 2 drum sticks and 4 chicken wings?
- _____

22.3 Convert:

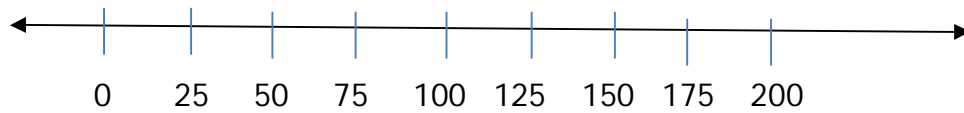
- a. R9,95 into _____c
- b. 1550c into R_____

23.1 Use the number line to write an addition number sentence.

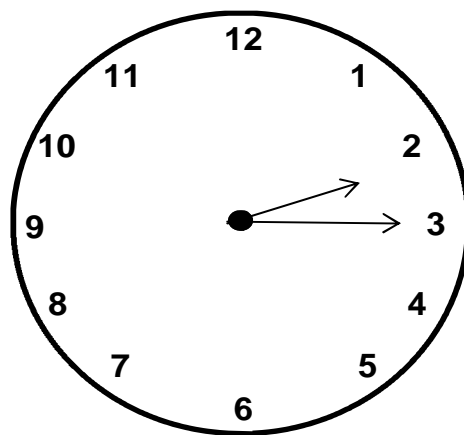


23.2 Draw hops on the number line to show this number sentence.

$$200 - 50 = \underline{\hspace{2cm}}$$

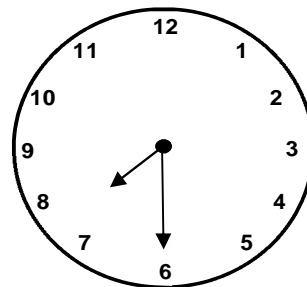
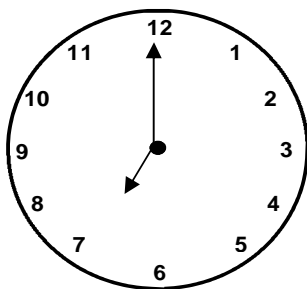


24.1 Complete the sentence below.



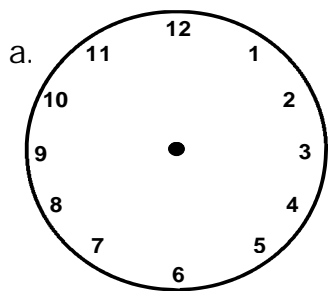
The time on the analogue clock reads _____

- 24.2 Liza walks to school. She leaves home at 7:00. She gets to school at 7:30.

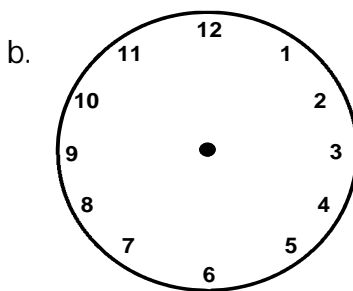


It took Liza _____ minutes to walks to school.

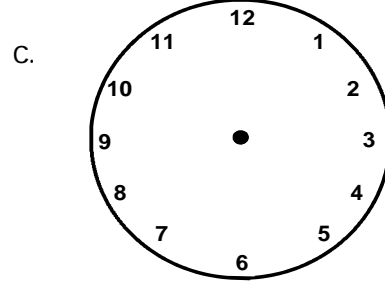
- 24.3 Draw the hands on each of the following clock faces to show the required time.



half past 9



11 o'clock

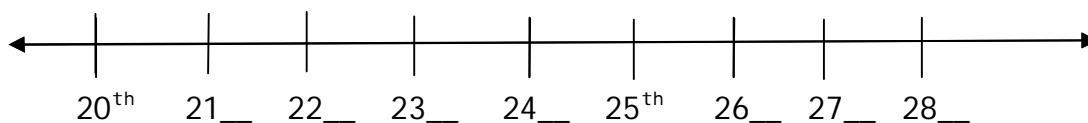


quarter past 7

- 25.1 Fill in the missing ordinal numbers.

11 th	12 th				16 th
20 th	21 st		23 rd		

- 25.2 Complete the number line.



25.3 Match the number symbol to the number name.

1 st	twenty-second
22 nd	fourteenth
23 rd	first
14 th	twenty-third