

MATHEMATICS
Grade 4
TERM 2 2020
Formal
Assessment



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Term 2 Investigation

LEARNER'S NAME: _____ DATE: _____

GRADE 4 TERM 2 INVESTIGATION RUBRIC

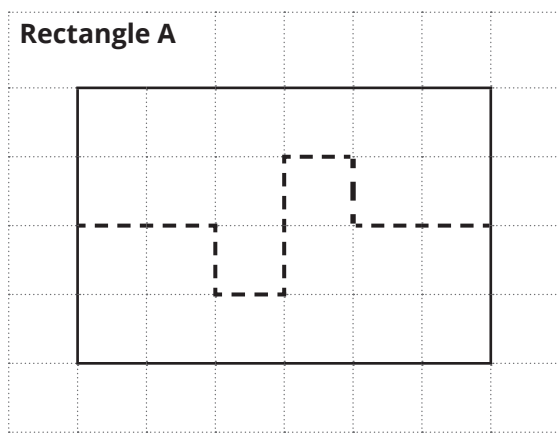
	4	3	2	1	Score
Problem Solving	No errors when dividing rectangles and polygons	Few errors when dividing rectangles and polygons	Many errors when dividing rectangles and polygons	Little or no understanding of what they are being asked to do	
Maths Content Knowledge of <ul style="list-style-type: none"> - Vertical lines - Horizontal lines - Slanting lines - Rectangles - Polygons - Half - Same size - Same shape 	Demonstrates a clear knowledge of the maths content	Demonstrates a general knowledge of the maths content	Demonstrates a limited knowledge of the maths content	Demonstrates little or no knowledge of the maths content	
Maths Skills Ability to <ul style="list-style-type: none"> - Divide the rectangle in half - Recognise that the two halves are the same shape - Recognise that the two halves are NOT the same shape 	Demonstrates a clear application of math skills	Demonstrates a general application of math skills	Demonstrates a limited application of maths skills	Demonstrates little or no application of maths skills	
Maths Communication	Accurately communicates solutions to problems and concepts.	Satisfactorily communicates solutions to problems and concepts	Limited communication of solutions to problems and concepts	Inaccurately communicates solutions to problems and concepts	
Presentations	Presents solutions in an easy to follow step-by-step method	Presents solutions in a logical manner	Presents solutions that are difficult to follow at times	Presents solutions with steps which the reader is unable to follow	
Use of Mathematics Terminology	Correctly uses appropriate mathematical terminology	Correctly uses some mathematical terminology	Uses some mathematical terminology but not correctly	Does not use mathematical terminology	
TOTAL					24

Teacher's Comments: _____

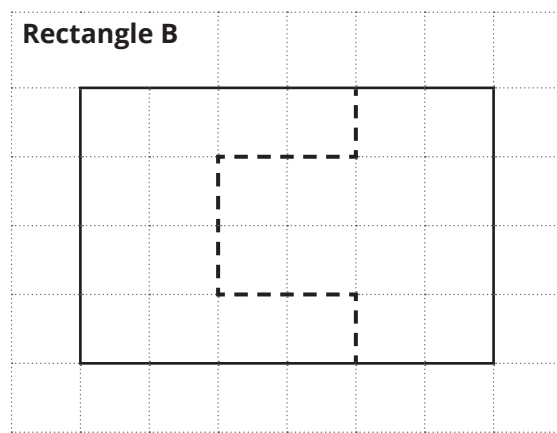
INVESTIGATING POLYGONS AND FRACTIONS

Themba and Patience are doing their homework. They are dividing rectangles in half. They have to make sure that the two halves are *exactly the same shape and exactly the same size*.

Themba and Patience used vertical and horizontal lines to divide Rectangle A and Rectangle B in half.



These two halves are the same size and the same shape



These two halves are the same size but are NOT the same shape

REMEMBER

Horizontal lines **Vertical lines**

WORK WITH YOUR PARTNER

1 Study Rectangle A and Rectangle B.

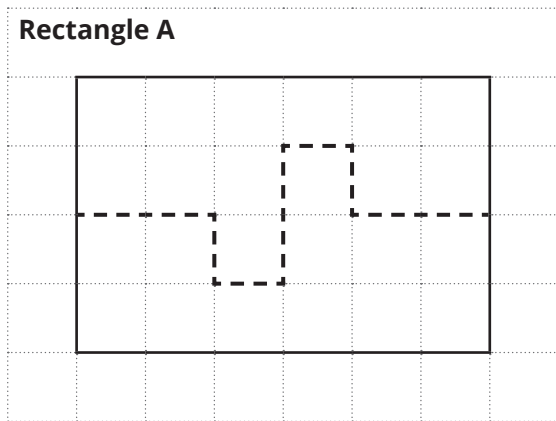
- a** How can you check that the dotted lines have divided Rectangle A in half and have divided Rectangle B in half?

- b** How do you know that the two halves of Rectangle A are the same size and the same shape?

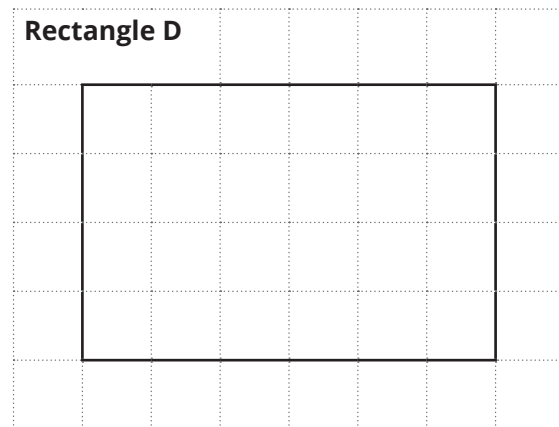
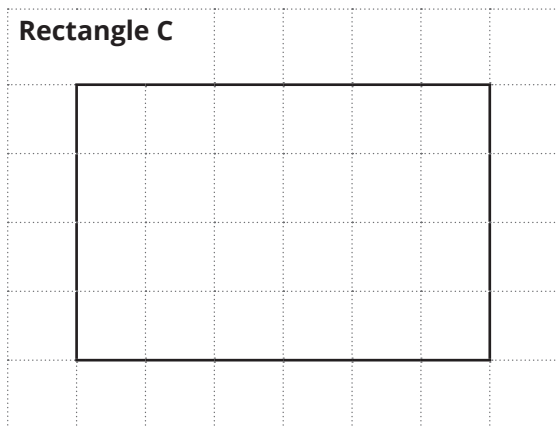
- c** How do you know that the two halves of Rectangle B are the same size but not the same shape?

INVESTIGATING POLYGONS AND FRACTIONS

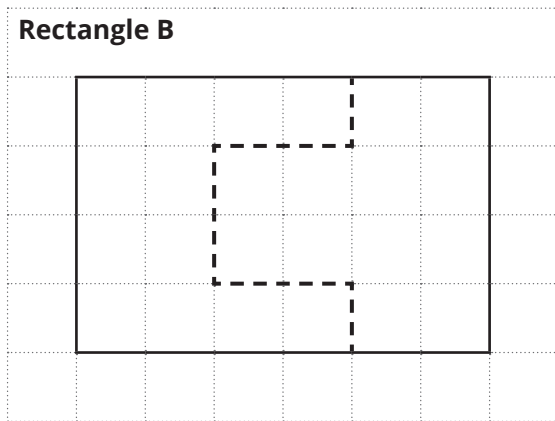
- 2 Both halves of Rectangle A are *exactly the same size and shape*.



Draw vertical and/or horizontal lines on Rectangle C and Rectangle D to divide these two rectangles in half so that the two halves are *exactly the same size and shape*. Make sure that you divide Rectangle C and Rectangle D in a different way to Rectangle A.

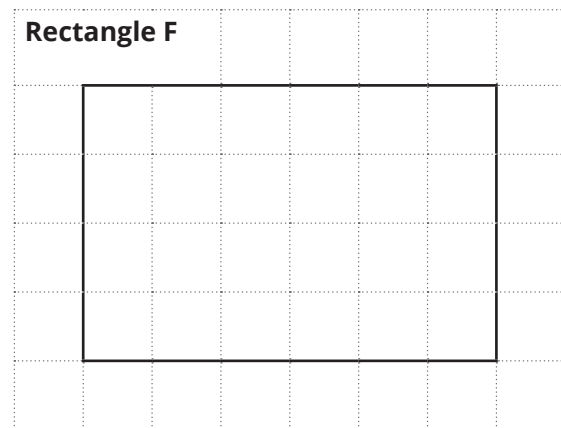
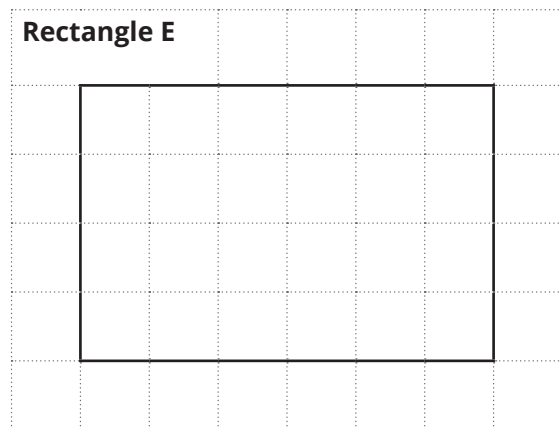


- 3 Both halves of Rectangle B are *exactly the same size but are NOT the same shape*.



Draw vertical and/or horizontal lines on Rectangle E and Rectangle F to divide these two rectangles in half so that the two halves are *exactly the same size but are not the same shape*.

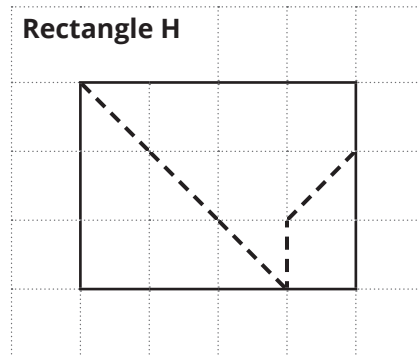
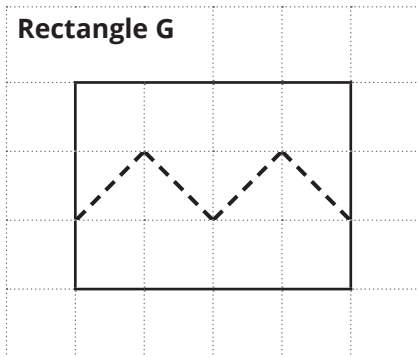
Make sure that you divide Rectangle E and Rectangle F in a different way to Rectangle B.



WORK ON YOUR OWN

4 Themba and Patience have to divide another rectangle in half. This time they have to use slanting lines as well as horizontal lines and vertical lines.

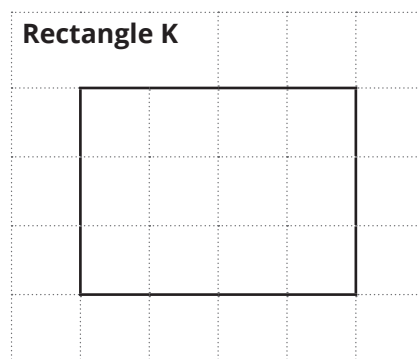
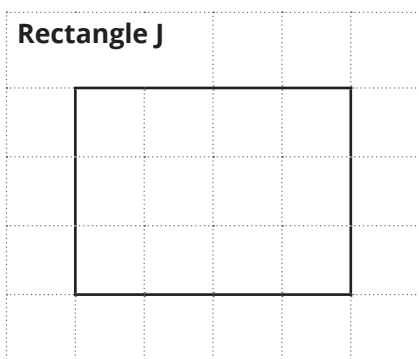
a Themba drew Rectangle G and Patience drew Rectangle H.



Explain how you can work out if Rectangle G and Rectangle H have been divided in half.

b Use slanting lines as well as horizontal lines and vertical lines to divide Rectangle J and Rectangle K in half.

Your way of dividing must be different to the way Themba and Patience divided their rectangles.



MEMO: INVESTIGATING POLYGONS AND FRACTIONS

HINTS FOR THE TEACHER

STEP 1: Make sure you know what an Investigation is

According to the CAPS (page 295), an Investigation promotes critical and creative thinking.

- It can be used to discover rules or concepts and may involve inductive reasoning, identifying or testing patterns or relationships, drawing conclusions, and establishing general trends.
- To avoid having to assess work which is copied without understanding, it is recommended that whilst initial investigation could be done at home, the final write-up should be done in class, under supervision, without access to any notes.
- Investigations may be marked using rubrics and / or memorandums. The rubric can be specific to the task, or generic, listing the number of marks awarded for each skill.

These skills include:

- organising and recording ideas and discoveries using, for example, diagrams and tables
- communicating ideas with appropriate explanations
- calculations showing clear understanding of mathematical concepts and procedures
- generalising and drawing conclusions
- All the formal tasks should be done in class under the supervision of the teacher and schools must provide resources where needed.

STEP 2: Photocopy the six pages of the Investigation for each learner.

STEP 3: Go over the rubric with the learners.

Make sure the learners know how their work is going to be evaluated so that they can improve the quality of their work and revise it before handing it in.

STEP 4: Discuss the Investigation with the learners.

Make sure the learners understand what they have to do for each question.

STEP 5: Allow the learners to do the Investigation

The learners answer questions 1, 2 and 3 with a partner but have to write their own solutions on their Investigation sheets.

Make sure the learners answer question 4 and 5 on their own.

STEP 6: Tell the learners when the work has to be handed in.

Plan beforehand when you want them to hand the work in.

STEP 7: Mark the learners work.

STEP 8: Use the rubric to analyse the learner's solution and give each learner a mark out of 24.

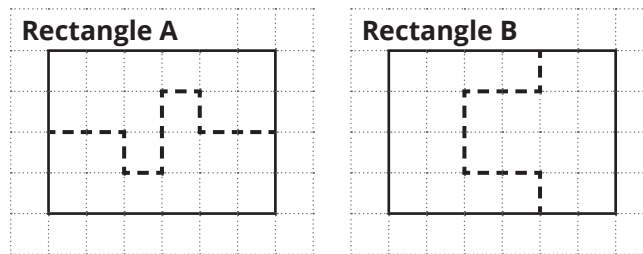
The analysis can be used to identify learners' errors and misconceptions and to inform teaching and learning.

STEP 9: Write a comment for each learner to assist them with understanding what they have done correctly and what they have done wrong when completing the Investigation.

SOLUTION

THE LEARNERS WORK WITH THEIR PARTNERS

- 1 Study Rectangle A and Rectangle B.



- a Write down how we can check that the dotted lines have divided Rectangle A in half and have divided Rectangle B in half.

ANSWERS

(In Rectangle A, count the number of squares above the dotted lines and the number of squares below the dotted lines. We find that there are 12 squares above the dotted line and 12 squares below the dotted lines, so the dotted lines divide Rectangle A in half.)

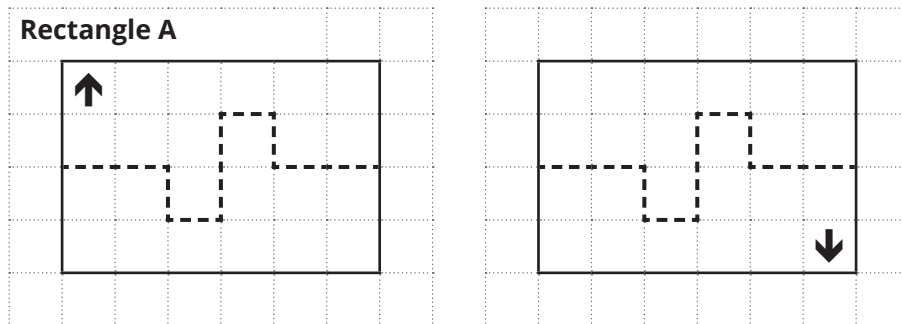
In Rectangle B, count the number of squares to the left of the dotted lines and the number of squares to the right of the dotted lines. We find there are 12 squares to the left of the dotted line and 12 squares to the right of the dotted line, so the dotted lines divide Rectangle B in half.)

- b How do we know that the two halves of Rectangle A are the same size *and the same shape*?

ANSWERS

(Answers will vary. Here are some examples of possible answers:

- If we cut along the dotted line and fit one piece on top of the other, they will fit together exactly
- If we turn Rectangle A around, the second rectangle looks exactly the same as the first rectangle.)



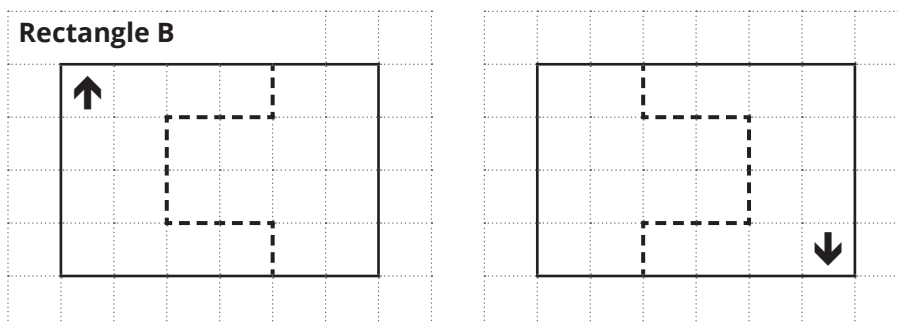


- c How do we know that the two halves of Rectangle B are the same size *but not the same shape*?

ANSWERS

(Answers will vary. Here are some examples of possible answers:

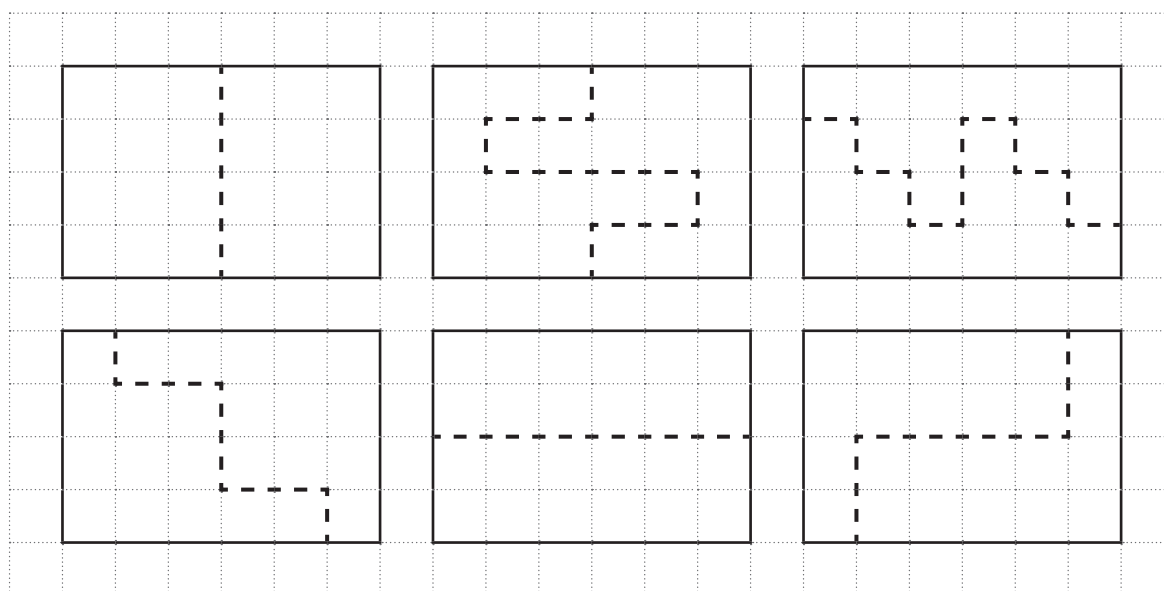
- If we cut along the dotted line and fit one piece on top of the other, they will NOT fit exactly on top of each other
- The left-hand side of the rectangle is made up of 4 squares + 2 squares + 2 squares + 4 squares = 12 squares
The right-hand side of the rectangle is made up of 2 squares + 4 squares + 4 squares + 2 squares = 12 squares.
So, the left-hand side of the rectangle is NOT the same shape as the right-hand side of the rectangle.
- If we turn Rectangle A around, the second rectangle looks different to the first rectangle.)



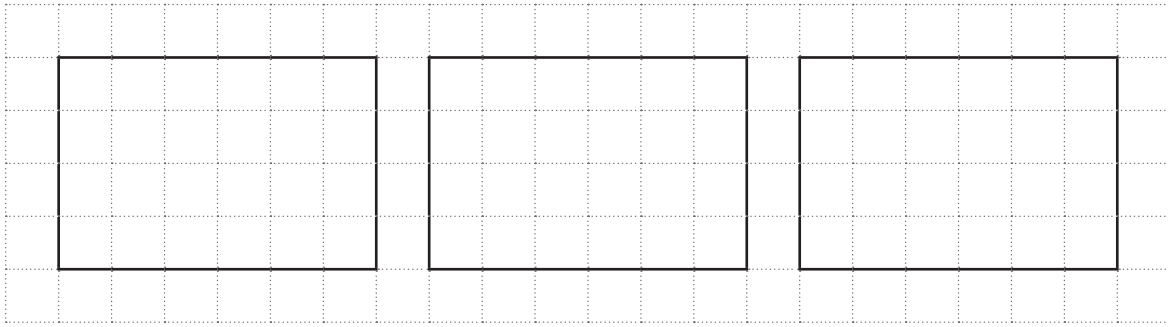
- 2 The two halves of Rectangle C and Rectangle D have to be *same shape and size*.

ANSWERS

(Six possible solutions are given. Use the blank rectangles on the next page to record other ways of dividing the rectangles where the two halves are the same shape.)



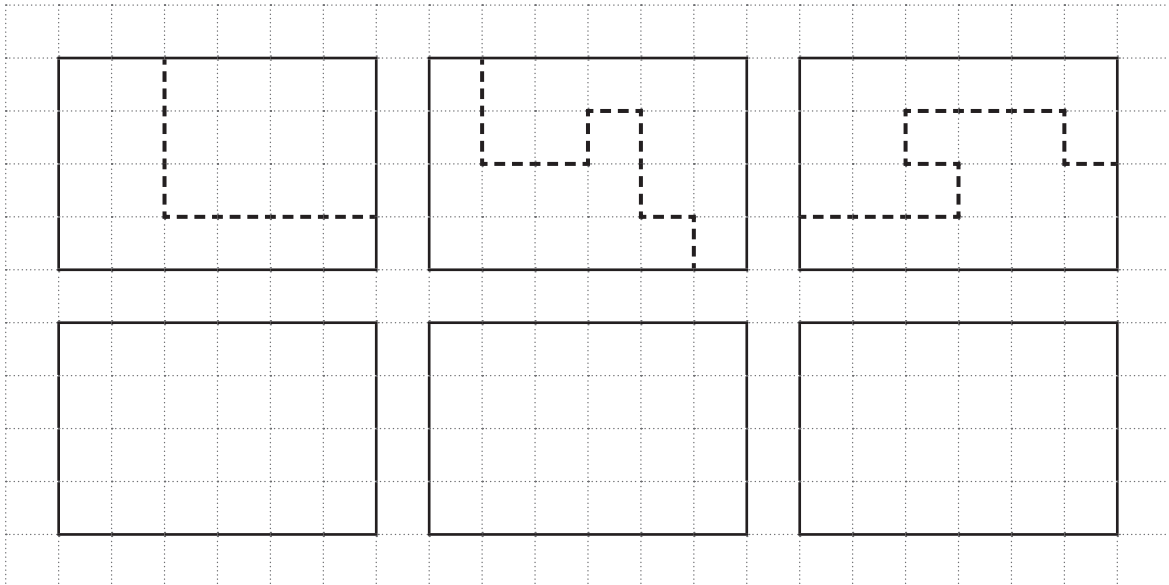
INVESTIGATING POLYGONS AND FRACTIONS



- 3 The two halves of Rectangle E and Rectangle F have to be the same size but *not the same shape*.

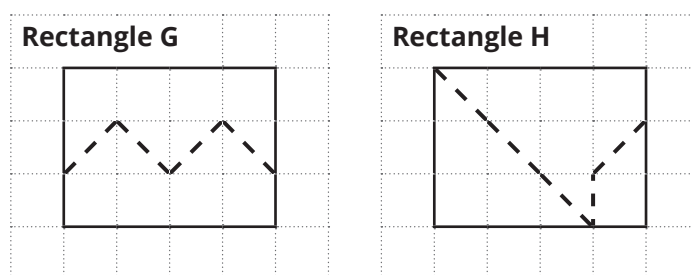
ANSWERS

(Three possible solutions are given. Use the blank rectangles to record other ways of dividing the rectangles where the two halves are not the same shape.)



WORK ON YOUR OWN

- 4 Themba and Patience have to divide another rectangle in half.
This time they have to use slanting lines as well as horizontal lines and vertical lines.
- a Themba drew Rectangle G and Patience drew Rectangle H.



Explain how you can work out if Rectangle G and Rectangle H have been divided in half.

ANSWERS

(Answers will vary. Here is a possible answer:

The slanting lines divide a square in half.

The top half of Rectangle G is made up of 4 whole squares + 4 half-squares =
 $(4 + 2) = 6$ squares

The bottom half of Rectangle G is made up of 4 half-squares + 4 whole squares =
 $(2 + 4) = 6$ squares

The top half of Rectangle H is made up of 4 whole squares + 4 half-squares =
 $(4 + 2) = 6$ squares

The bottom half of Rectangle H is made up of 2 parts. The left-hand part is made up of 3 whole squares + 3 half squares; the right-hand part is made up of 1 whole square + 1 half square = $(3 + 1\frac{1}{2} + 1 + \frac{1}{2}) = 6$ squares)

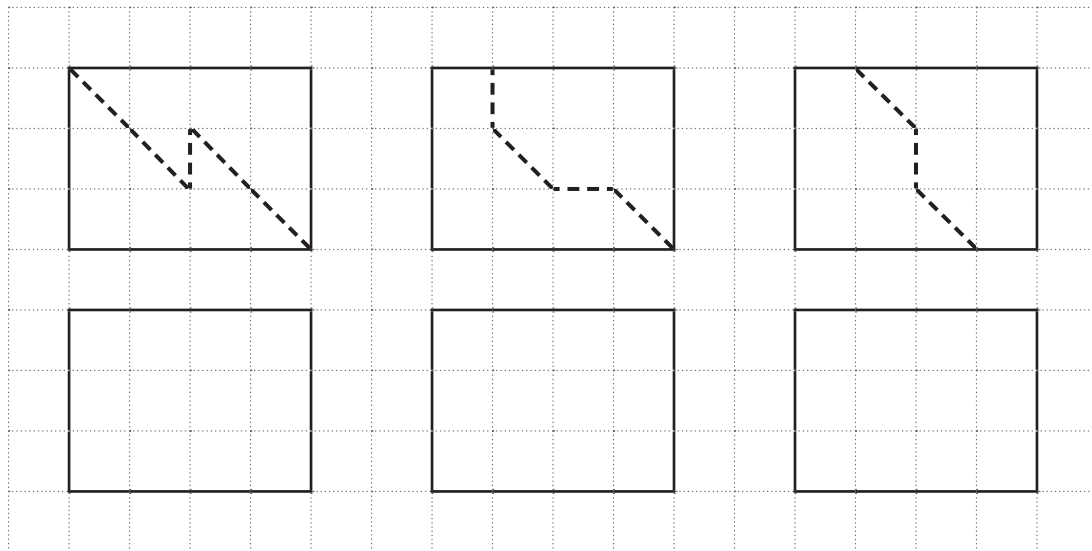
INVESTIGATING POLYGONS AND FRACTIONS

- b Use slanting lines as well as horizontal lines and vertical lines to divide Rectangle J and Rectangle K in half.

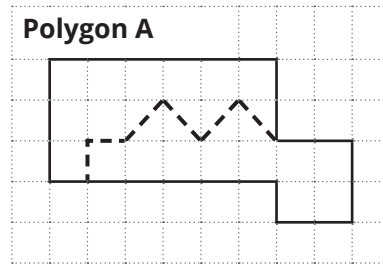
Your way of dividing must be different to the way Themba and Patience divided their rectangles.

ANSWERS

(Three possible solutions are given. Use the blank rectangles to record other ways of dividing the rectangles with slanting lines and/or vertical lines and/or horizontal lines.)



- 5 Polygon A was divided in half using horizontal lines, vertical lines and slanting lines.



- a Explain how you can work out if Polygon A has been divided in half.

ANSWERS

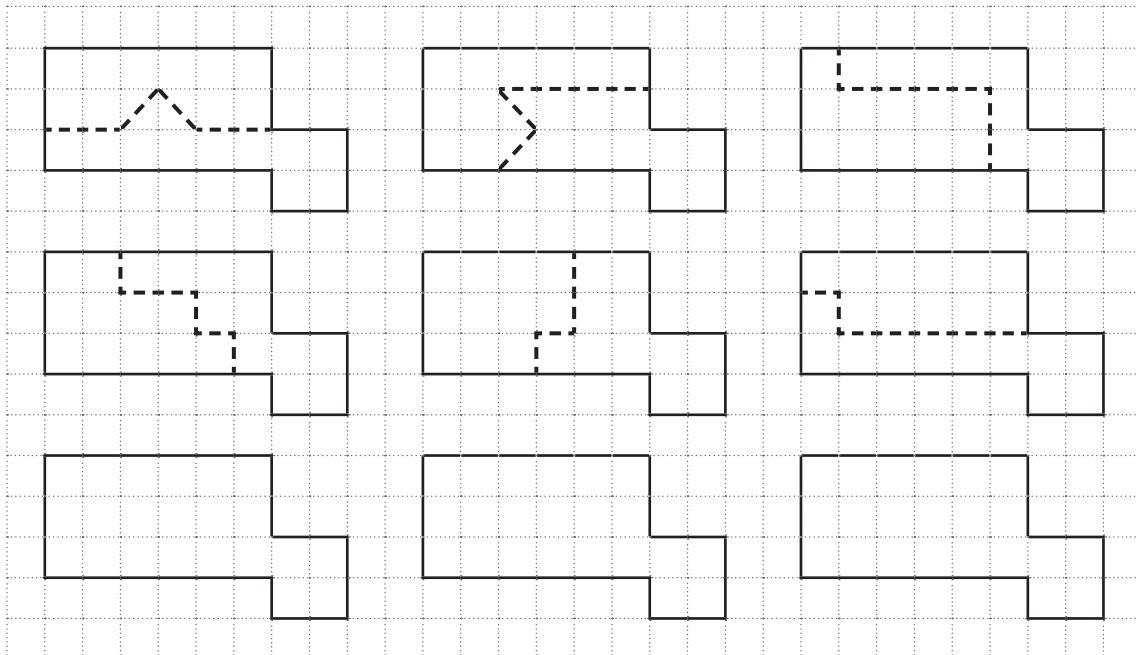
(Answers will vary. Here is a possible answer:

The top half of Polygon A is made up of 9 whole squares + 4 half-squares =
 $(9 + 2) = 11$ squares

The bottom half of Polygon A is made up of 4 half-squares + 9 whole squares =
 $(2 + 9) = 11$ squares)

- b Use slanting lines and/or horizontal lines and/or vertical lines to divide Polygon B and Polygon C in half.

Your way of dividing must be different to the way Polygon A has been divided in half.



GRADE 4 JUNE EXAMINATION PAPER 1

TIME: 1 HOUR

TOTAL: 25 MARKS

NAME: _____

INSTRUCTIONS TO LEARNERS

1. Answer all the questions in the spaces provided
2. No calculators may be used

1. NUMBERS UP TO 1 000 000

(6 MARKS)

- a. Rewrite 985 007 in expanded notation

_____ (1)

- b. Circle the even numbers in the box below.

1 391	24 837
2 648	
8 125	6 753
99 100	

(2)

- c. Calculate:

$$13\,000 + 7\,000 = \square$$

$$58\,000 \div 100 = \square$$

(2)

- d. Rewrite the following numbers from smallest to largest:

1 253; 926; 1 025; 899

_____ (1)



2. ADDITION AND SUBTRACTION

(5 MARKS)

- a. Find the answer to $354\,700 - 341\,532 = \square$

(3)

- b. The shop sells a pair of soccer boots at R85 less than the original price.
The price is now R845.
How much were the soccer boots before?
(Show how you get to your answer)

(2)

3. APPROXIMATE NUMBERS AND CALCULATIONS

(5 MARKS)

Round the following numbers to the nearest thousand and find the approximate answer.

	Round off both numbers	Approximate answer
Example: $8\,512 + 985 = \square$	$9\,000 + 1\,000$	
$3\,295 + 7\,527 = \square$		
$6\,947 - 1\,450 = \square$		

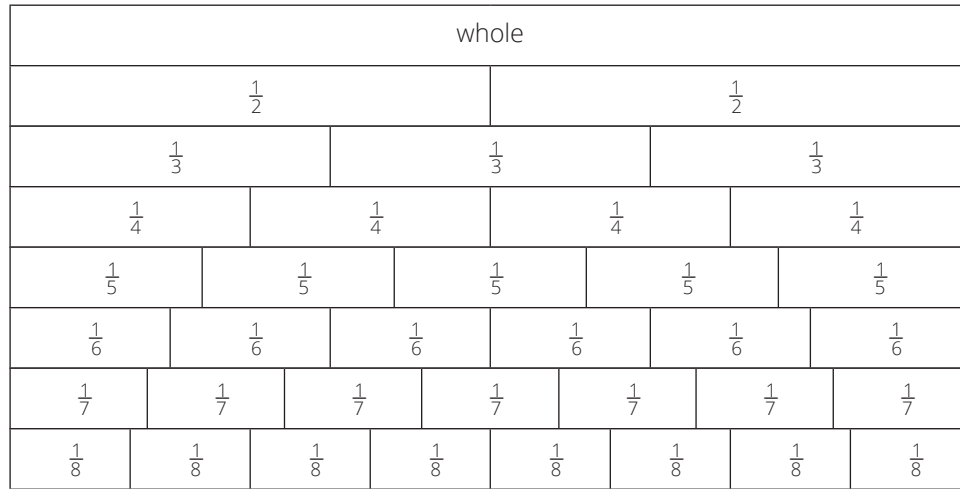
(5)



4. COMMON FRACTIONS

(5 MARKS)

a. Use the fraction wall to answer the questions



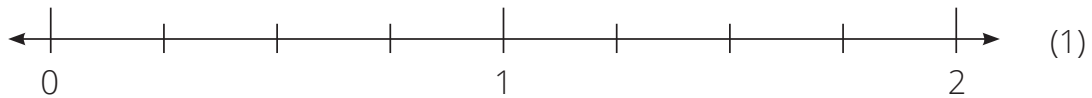
Fill in either > or < or = between these two fractions:

$\frac{3}{7} \dots \frac{2}{5}$ (1)

Write down three fractions that are the same as $\frac{2}{4}$

_____ (1)

b. Mark $1\frac{3}{4}$ on the number line.



c. Use a number line to find the answer.

$\frac{2}{5} + \frac{4}{5} = \square$



d. Use any method to find the answer to $1\frac{2}{7} - \frac{4}{7} = \square$

(1)

MEMO: GRADE 4 JUNE EXAMINATION PAPER 1

TIME: 1 HOUR

TOTAL: 25 MARKS

	K	RP	CP	PS	TOT
<p>1. a. Rewrite 985 007 in expanded notation $900\ 000 + 80\ 000 + 5\ 000 + 7$ ✓ OR $9\ \text{HTh} + 8\ \text{TTh} + 5\ \text{Th} + 7\ \text{O}$ (1)</p>	1				(6)
<p>b. Circle the even numbers in the box below.</p> <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 10px auto;"> <p>1 391 24 837</p> <p style="text-align: center;">(2 648) ✓</p> <p>8 125 6 753</p> <p style="text-align: center;">(99 100) ✓</p> </div> <p>(2)</p>	2				
<p>c. Calculate: $13\ 000 + 7\ 000 = 20\ 000$ ✓ $58\ 000 \div 100 = 580$ ✓ (2)</p>		2			
<p>d. Rewrite the following numbers from smallest to largest: 1 253; 926; 1 025; 899 $899; 926; 1\ 025; 1\ 253$ ✓ (1)</p>	1				



K	RP	CP	PS	TOT
---	----	----	----	-----

2. a. Find the answer to $354\ 700 - 341\ 532 = \checkmark$
 Here are three possible methods that the learners may have used:

	HTh	TTh	Th	H	T	O
	3	5	4	6	9	10
-	3	4	1	5	3	2
		1	3	1	6	8

✓ for getting the HTh, TTh and Th correct
 ✓✓ for getting the H, T, O correct
 (3)

HTh	TTh	Th	H	T	O
	1	3	1	6	8

✓ for getting the HTh, TTh and Th correct
 ✓✓ for getting the H, T, O correct
 (5)

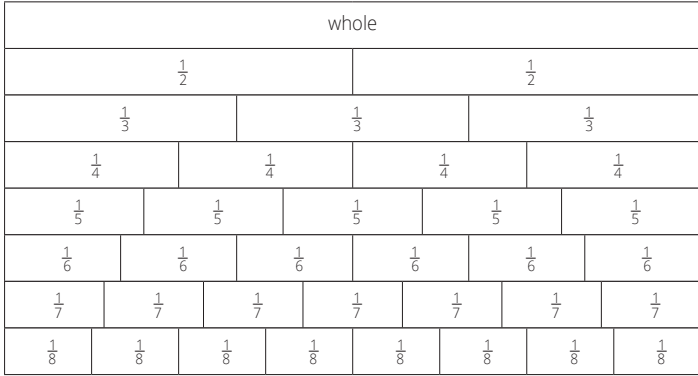
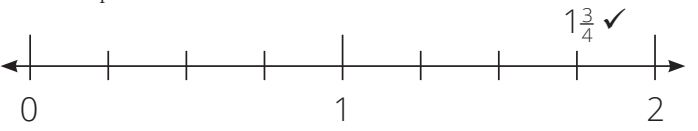
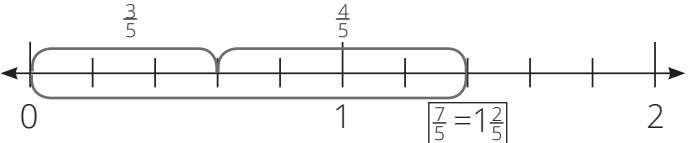
(Learners haven't used the simplified pictorial method for TTh and HTh. But it is possible to create own symbols for these 2 places to do subtraction.)
 (3)

$341\ 532 + 8 = 341\ 540 \checkmark$
 $341\ 540 + \underline{60} = 341\ 600 \checkmark$
 $341\ 600 + \underline{100} = 341\ 700$
 $341\ 700 + \underline{3\ 000} = 344\ 700$
 $344\ 700 + \underline{10\ 000} = 354\ 700$
 $10\ 000 + 3\ 000 + 100 + 60 + 8 = 13\ 168 \checkmark$
 (3)

b. The shop sells a pair of soccer boots at R85 less than the original price.
 The price is now R845.
 How much were the soccer boots before?
 (Show how you get to your answer)

$R845 + R85 = R930$
 ✓ for getting the operation correct (addition)
 ✓ for getting the answer correct.
 (2)



	K	RP	CP	PS	TOT												
<p>3. Round the following numbers to the nearest thousand and find the approximate answer.</p> <table border="1"> <thead> <tr> <th></th> <th>Round off both numbers</th> <th>Approximate answer</th> </tr> </thead> <tbody> <tr> <td>Example: $8\ 512 + 985 = \square$</td> <td>$9\ 000 + 1\ 000$</td> <td>$10\ 000$ ✓</td> </tr> <tr> <td>$3\ 295 + 7\ 527 = \square$</td> <td>$4\ 000 + 8\ 000$ ✓</td> <td>$12\ 000$ ✓</td> </tr> <tr> <td>$6\ 947 - 1\ 450 = \square$</td> <td>$7\ 000 - 1\ 000$ ✓</td> <td>$6\ 000$ ✓</td> </tr> </tbody> </table>		Round off both numbers	Approximate answer	Example: $8\ 512 + 985 = \square$	$9\ 000 + 1\ 000$	$10\ 000$ ✓	$3\ 295 + 7\ 527 = \square$	$4\ 000 + 8\ 000$ ✓	$12\ 000$ ✓	$6\ 947 - 1\ 450 = \square$	$7\ 000 - 1\ 000$ ✓	$6\ 000$ ✓	2	3			(5)
	Round off both numbers	Approximate answer															
Example: $8\ 512 + 985 = \square$	$9\ 000 + 1\ 000$	$10\ 000$ ✓															
$3\ 295 + 7\ 527 = \square$	$4\ 000 + 8\ 000$ ✓	$12\ 000$ ✓															
$6\ 947 - 1\ 450 = \square$	$7\ 000 - 1\ 000$ ✓	$6\ 000$ ✓															
<p>4. a. Use the fraction wall to answer the questions</p>  <p>Fill in either > or < or = between these two fractions: $\frac{3}{7} > \frac{2}{5}$ ✓ (1)</p> <p>Write down three fractions that are the same as $\frac{2}{4}$ $\frac{1}{2}, \frac{3}{6}, \frac{4}{8}$ ✓ (1)</p>		1			(5)												
<p>b. Mark $1\frac{3}{4}$ on the number line.</p> 			1														
<p>c. Use a number line to find the answer.</p> $\frac{2}{5} + \frac{4}{5} = (\frac{7}{5}) = 1\frac{2}{5}$ ✓  <p><i>If there are learners whose number line is not correct, but get the answer correct, they can get 1 mark. The number line is only one of the strategies they can use.</i> (1)</p>			1														
<p>d. Use any method to find the answer.</p> $1\frac{2}{7} - \frac{4}{7} = (\frac{9}{7} - \frac{4}{7}) = \frac{5}{7}$ ✓ (1)			1														



	K	RP	CP	PS	TOT																																																
<p>5. a. Use the column method to calculate $3 \times 15 = \square$</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td></td><td>T</td><td>O</td></tr> <tr><td></td><td>1</td><td>5</td></tr> <tr><td>×</td><td></td><td>3</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td></td><td>4</td><td>5</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table> <table border="1" style="display: inline-table;"> <tr><td></td><td>T</td><td>O</td></tr> <tr><td></td><td>1</td><td>5</td></tr> <tr><td>×</td><td></td><td>3</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td></td><td>1</td><td>5</td></tr> <tr><td>+</td><td>3</td><td>0</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td></td><td>4</td><td>5</td></tr> <tr><td></td><td></td><td></td></tr> </table> <p><i>(Either method can be used.)</i> (1)</p>		T	O		1	5	×		3	<hr/>				4	5								T	O		1	5	×		3	<hr/>				1	5	+	3	0	<hr/>				4	5					1			
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<hr/>																																																					
	4	5																																																			
<p>b. My friend buys 24 chocolates. They cost R4 each. How much do they cost altogether?</p> <p>Write a number sentence: $24 \times 4 = R \square$ ✓</p> <p>Find the answer:</p> <table border="1" style="display: inline-table;"> <tr><td></td><td>T</td><td>O</td></tr> <tr><td></td><td>2</td><td>4</td></tr> <tr><td>×</td><td></td><td>4</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td></td><td>1</td><td>6</td></tr> <tr><td>+</td><td>8</td><td>0</td></tr> <tr><td colspan="3"><hr/></td></tr> <tr><td></td><td>9</td><td>6</td></tr> <tr><td></td><td></td><td></td></tr> </table> <p>They cost R96 altogether. ✓ (3)</p>		T	O		2	4	×		4	<hr/>				1	6	+	8	0	<hr/>				9	6					1		2	(4)																					
	T	O																																																			
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	1	6																																																			
+	8	0																																																			
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	9	6																																																			
Total Marks	6	11	4	4	25																																																
Actual Percentage	24%	44%	16%	16%	100%																																																
Required Percentage	25%	45%	20%	10%	100%																																																



GRADE 4 JUNE EXAMINATION PAPER 2

TIME: 1 HOUR

TOTAL: 25 MARKS

NAME: _____

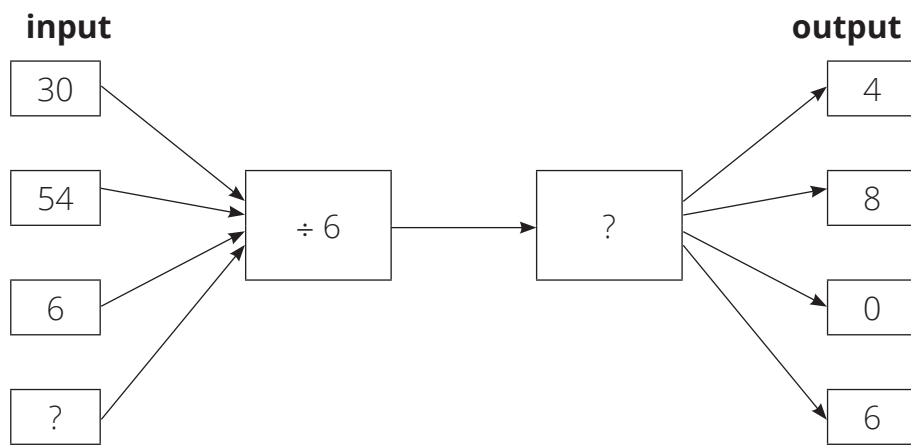
INSTRUCTIONS TO LEARNERS

1. Answer all the questions in the spaces provided
2. No calculators may be used

1. NUMERIC PATTERNS, GEOMETRIC PATTERNS AND NUMBER SENTENCES

(9 MARKS)

- a. Give the next two terms in the number pattern: (1)
5; 11; 17; 23; _____ ; _____
- b. Fill in the missing numbers on this flow diagram.



(2)

- c. Complete the table below showing the number of matches used in this geometric pattern.



Number of triangles	1	2	3	4	5	6
Number of matches	3	6	9			

Describe the pattern in words.

(2)

- d. Is the sentence true or false?

$$5 \times 5 \times 5 = 5 \times 3$$

(1)

- e. Find the missing numbers:

$$16 + \square = 20 + 13$$

$$900 - \square = 70$$

(2)

- f. Calculate. Show all working out.


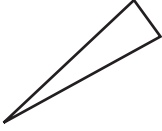

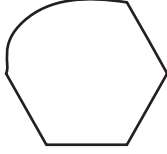
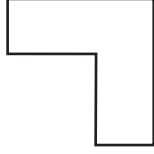
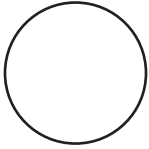

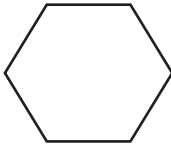
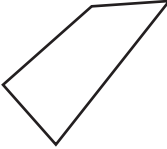
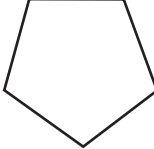

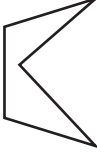
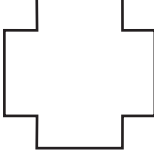
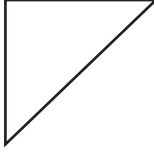
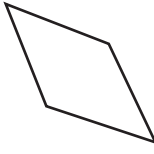
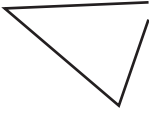

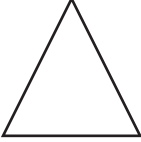
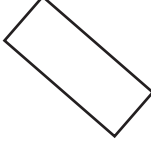
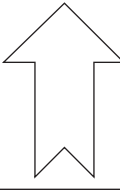
$$39 + 48 + 21 = \square$$

(1)

2. 2-D GEOMETRY

(7 MARKS)

Study the shapes in the table.

4					
3					
2					
1					
	A	B	C	D	E

- a. List all the cells where you will find a triangle.

_____ (3)

- b. In which cell will you find an open shape? _____ (1)

- c. In which cells will you find a shape with curved sides? _____ (2)

- d. What shape is in cell E3? _____ (1)

3. DATA HANDLING

(9 MARKS)

- a. The learners in Grade 4 did a survey to find out which kind of vegetables the Grade 4 learners like. This is what they found:

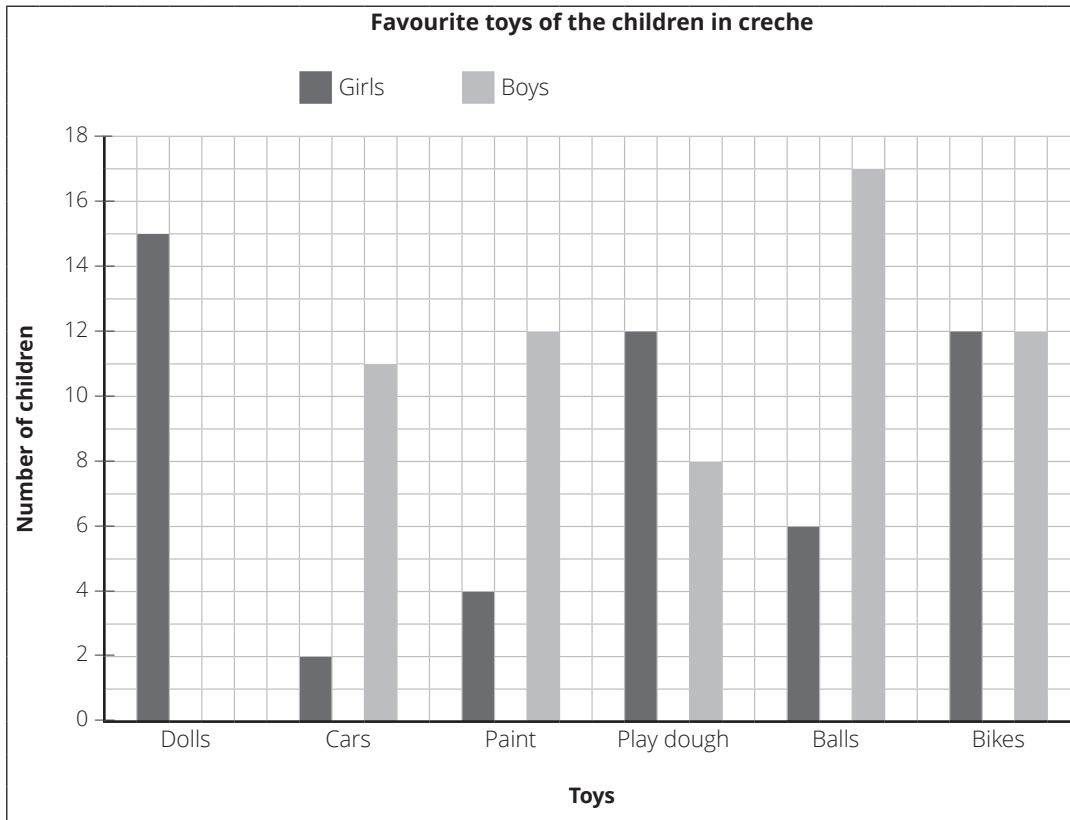
Vegetable	Number of learners
Potatoes	25
Cabbage	20
Marogo	32

Draw a pictograph to show this data. Use the KEY given.

Kinds of vegetables the Grade 4 learners like	
Potatoes	
Cabbage	
Marogo	
KEY: 😊 = 5 learners	

(3)

- b. The children in the creche were asked which their favourite toys are. A bar graph was drawn to show the results.



How many boys said that paint was their favourite toy? _____ (1)

How many more boys than girls like balls? _____ (1)

Which toy or toys was liked by the most children?

_____ (1)

c. Use the two-way table to answer the questions.

Polygon	Square	Triangle	Hexagon	Total
Colour				
Red	2	1	0	3
Blue	3	2	3	8
Yellow	5	4	5	14
Total	10	7	8	25

How many blue triangles are there? _____

How many hexagons are there altogether? _____

How many yellow polygons are there in total? _____ (3)

TOTAL: 25 MARKS

ASSESSMENT

MEMO: GRADE 4 JUNE EXAMINATION PAPER 2

TIME: 1 HOUR

TOTAL: 25 MARKS

	K	RP	CP	PS	TOT														
1. a. 5; 11; 17; 23; <u>29</u> ; <u>35</u> ✓	1																		
<p>b. input</p> <pre> graph LR subgraph Input I1[30] I2[54] I3[6] I4[42 ✓] end subgraph Process1 P1[÷ 6] end subgraph Process2 P2[-1 ✓] end subgraph Output O1[4] O2[8] O3[0] O4[6] end I1 --> P1 I2 --> P1 I3 --> P1 I4 --> P1 P1 --> P2 P2 --> O1 P2 --> O2 P2 --> O3 P2 --> O4 </pre>			2																
<p>c.</p> <table border="1"> <tr> <td>Number of triangles</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>Number of matches</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> <td>18</td> </tr> </table> <p>(all three numbers must be correct ✓) Pattern is: add 3 matchsticks every time. ✓ OR number of matches = 3 × number of triangles OR Number of matches is three times the number of triangles</p>	Number of triangles	1	2	3	4	5	6	Number of matches	3	6	9	12	15	18		1		1	(9)
Number of triangles	1	2	3	4	5	6													
Number of matches	3	6	9	12	15	18													
d. $5 \times 5 \times 5 = 5 \times 3$ is false ✓		1																	
<p>e. $16 + \square = 20 + 13$ So, $16 + \square = 33$ The missing number is 17 ✓</p> <p>$900 - \square = 70$ The missing number is 830 ✓</p>		1	1																
<p>f. Calculate: show the strategy you used. (1 mark for either of these) $39 + 48 + 21 = \square$ $39 + 21 = 60, 60 + 48 = 108$ OR $(39 + 21) + 48 = 108$ OR $48 + (39 + 21) = 48 + 60 = 108$</p>		1																	

	K	RP	CP	PS	TOT																									
2. a. You find a triangle in cells B4 , ✓ C1 , ✓ D2 ✓		3			(7)																									
b. You find an open shape in A1 ✓	1																													
c. You find a shape with curved sides in A3 ✓ and D4 ✓	2																													
d. A pentagon ✓ is in cell E3	1																													
3. a.	<table border="1"> <thead> <tr> <th colspan="2">Kinds of vegetables the Grade 4 learners like</th> </tr> </thead> <tbody> <tr> <td>Potatoes</td> <td>😊😊😊😊😊 ✓</td> </tr> <tr> <td>Cabbage</td> <td>😊😊😊😊 ✓</td> </tr> <tr> <td>Marogo</td> <td>😊😊😊😊😊😊 (✓</td> </tr> <tr> <td colspan="2">KEY: 😊 = 5 learners</td> </tr> </tbody> </table>					Kinds of vegetables the Grade 4 learners like		Potatoes	😊😊😊😊😊 ✓	Cabbage	😊😊😊😊 ✓	Marogo	😊😊😊😊😊😊 (✓	KEY: 😊 = 5 learners																
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b.	<p>Paint was the favourite toy of 12 boys ✓</p> <p>17 - 6 = 11, 11 ✓ more boys like balls than girls</p> <p>Total number liking dolls = 15</p> <p>Total number liking cars = 2 + 11 = 13</p> <p>Total number liking paint = 4 + 12 = 16</p> <p>Total number liking play dough = 12 + 8 = 20</p> <p>Total number liking balls = 6 + 17 = 23</p> <p>Total number liking bikes = 12 + 12 = 24</p> <p>Bikes ✓ were liked by the most children</p>																													
c.	<p>Use the two-way table to answer the questions.</p> <table border="1"> <thead> <tr> <th>Polygon \ Colour</th> <th>Square</th> <th>Triangle</th> <th>Hexagon</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>Red</th> <td>2</td> <td>1</td> <td>0</td> <td>3</td> </tr> <tr> <th>Blue</th> <td>3</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <th>Yellow</th> <td>5</td> <td>4</td> <td>5</td> <td>14</td> </tr> <tr> <th>Total</th> <td>10</td> <td>7</td> <td>8</td> <td>25</td> </tr> </tbody> </table> <p>How many blue triangles are there? (2)</p> <p>How many hexagons are there altogether? (8)</p> <p>How many yellow polygons are there in total? (14)</p>					Polygon \ Colour	Square	Triangle	Hexagon	Total	Red	2	1	0	3	Blue	3	2	3	8	Yellow	5	4	5	14	Total	10	7	8	25
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