

FORM SEA/2009**C A R I B B E A N E X A M I N A T I O N S C O U N C I L****TRINIDAD AND TOBAGO****SECONDARY ENTRANCE ASSESSMENT****MATHEMATICS***75 minutes***PRIMARY
SCHOOL:** _____

_____**CENTRE NUMBER:** _____**READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

1. This test is divided into THREE sections.
2. Make sure that you understand the directions before you start to work on any section.
3. Write ALL your answers in this test booklet. Show ALL your working in the working column.
4. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Directions for the Mathematics Test

You are NOT allowed to use **calculators**.

This test has **THREE** sections with a total of 46 test items.

SECTION I has 20 items (Nos. 1 to 20).

SECTION II has 20 items (Nos. 21 to 40).

SECTION III has 6 items (Nos. 41 to 46).

You have 75 minutes for this test.

Answer **ALL** questions.

Read **EACH** question **CAREFULLY** before answering it.

Show **ALL** working in the column provided.

Marks will be given for correct steps taken.

Work carefully but do **NOT** spend too much time on any one question.

DO NOT WRITE IN THIS SPACE.

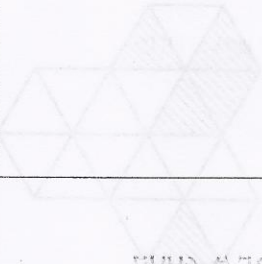
Strand	No.	Question	Total	Initial
Number	1	1 - 8		
	2	21 - 28		
	3	41 - 42		
Measurement & Money	4	9 - 15		
	5	29 - 35		
	6	43 - 44		
Geometry	7	16 - 18		
	8	36 - 39		
	9	45		
Statistics	10	19 - 20		
	11	40		
	12	46		
TOTALS				

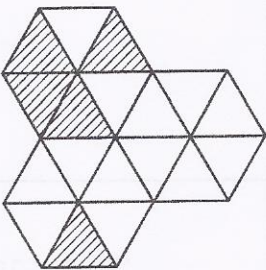
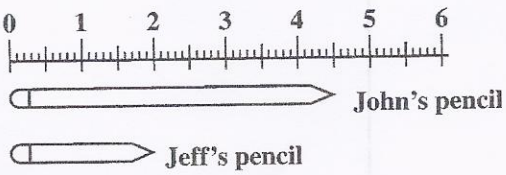
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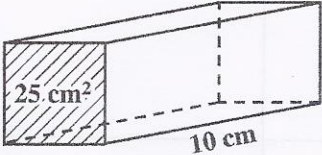


SECTION I

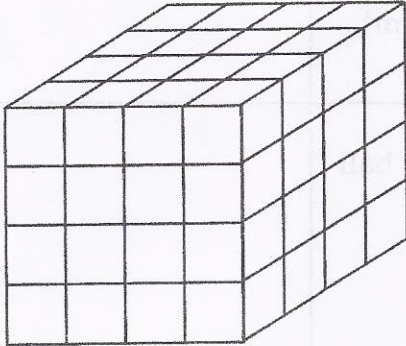
**Answer ALL questions. Each question is worth 1 mark.
Show ALL working in the Working Column.**

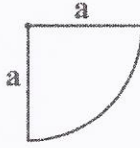
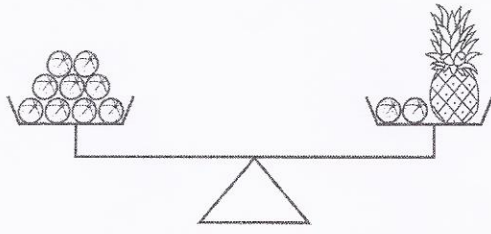
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
1.	Which digit in the numeral 71 463 represents TENS? Answer _____		1.		
2.	Write the numeral for the number one million two hundred and three thousand and four. Answer _____		2.		
3.	Calculate: 568×15 Answer _____		3.		
4.	Calculate: $2.4 \div 0.8$ Answer _____		4.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here						
			KC	AT	PS				
5.	<p>Carla scored 60 marks out of 75 on a Mathematics test.</p> <p>Express Carla's score as a percentage.</p> <p>Answer _____</p>		5.						
6.	<p>Circle the LARGEST decimal fraction in the set below.</p> <p>0.43 , 0.6 , 0.079</p>		6.						
7.	<p>Each number in the pattern below is formed by removing 1 digit from the number above it.</p> <table border="1" data-bbox="454 1249 673 1522"> <tr><td>57 896</td></tr> <tr><td>5 786</td></tr> <tr><td>576</td></tr> <tr><td> </td></tr> </table> <p>Fill in the box to complete the pattern.</p>	57 896	5 786	576			7.		
57 896									
5 786									
576									

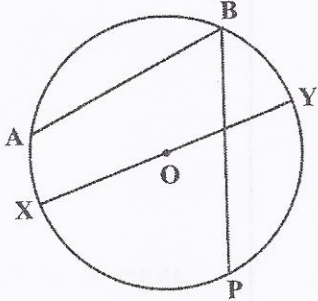
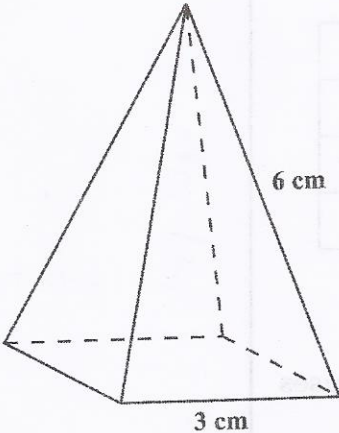
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
			KC	AT	PS	
8.	<p>What FRACTION of the entire shape below is shaded?</p>  <p>Answer _____</p>				8.	
DO NOT WRITE HERE			KC (2)	AT (4)	PS (2)	TOTAL (8)
9.	<p>How many centimetres LONGER is John's pencil than Jeff's pencil?</p>  <p>Answer _____ cm</p>				9.	

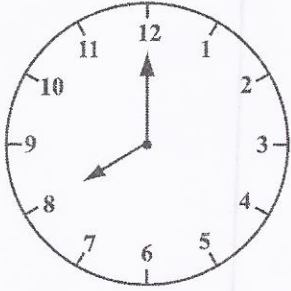










No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
10.	<p>The length of the cuboid below is 10 cm. The area of the shaded face is 25 cm².</p>  <p>Calculate the volume of the cuboid.</p> <p>Answer _____ cm³</p>		10.		
11.	<p>The costs of a football and a cricket ball are shown below.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Football</p>  <p>\$199.00</p> </div> <div style="text-align: center;"> <p>Cricket ball</p>  <p>\$72.50</p> </div> </div> <p>How much MORE does the football cost than the cricket ball?</p> <p>Answer \$ _____</p>		11.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
12.	<p>Kyle started a test at 9:45 a.m. and finished at 11:30 a.m. How long did he take to complete the test?</p> <p>Answer _____ hrs _____ mins</p>		12.		
13.	<p>The large cube below is built with small 1 cm^3 blocks.</p>  <p>What is the volume of the cube?</p> <p>Answer _____ cm^3</p>		13.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
			KC	AT	PS	
14.	<p>A piece of paper in the shape of a circle has a diameter of 28 cm. The paper is folded equally 2 times to form the shape below.</p>  <p>What is the length of the side a?</p> <p>Answer _____ cm</p>		14.			
15.	<p>The scale below is balanced. EACH orange weighs exactly 120 g.</p>  <p>What is the weight of the pineapple?</p> <p>Answer _____ g</p>		15.			
DO NOT WRITE HERE			KC (2)	AT (4)	PS (1)	TOTAL (7)

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
16.	<p>The diagram below shows a circle with centre O.</p>  <p>Identify the line of symmetry shown in the circle.</p> <p>Answer <u>4</u></p>		16.		
17.	<p>A solid with a square base is shown below.</p>  <p>How many edges measure 3 cm?</p> <p>Answer <u>5</u></p>		17.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here										
			KC	AT	PS								
18.	<p>What is the size of the LARGER angle formed between the hands on the clockface shown below?</p>  <p>Answer _____ degrees</p>				18.								
DO NOT WRITE HERE			KC (1)	AT (1)	PS (1)	TOTAL (3)							
19.	<p>The pictograph below shows the number of houses on three streets in a village.</p> <table border="1" data-bbox="344 1302 836 1528"> <thead> <tr> <th>Streets</th> <th>Number of Houses</th> </tr> </thead> <tbody> <tr> <td>First</td> <td></td> </tr> <tr> <td>Second</td> <td></td> </tr> <tr> <td>Third</td> <td></td> </tr> </tbody> </table> <p> = 5 houses</p> <p>Calculate the TOTAL number of houses on the three streets.</p> <p>Answer <u>33</u></p>	Streets	Number of Houses	First		Second		Third					19.
Streets	Number of Houses												
First													
Second													
Third													

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
			KC	AT	PS	
20.	<p>The pie chart below represents the types of books that Jim reads in a month.</p> <p>If Jim reads 12 comic books, how many books does he read ALTOGETHER?</p> <p>Answer _____</p>		20.			
DO NOT WRITE HERE			KC (0)	AT (1)	PS (1)	TOTAL (2)

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SECTION II

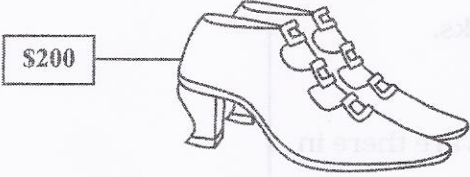
**Answer ALL questions. Each question is worth either 2 or 3 marks.
Show ALL working in the Working Column.**

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
21.	<p>Mr Chin's supermarket has 15 rows of canned peas. Each row has 25 cans.</p> <p>Calculate the TOTAL number of cans of peas in the supermarket.</p> <p>Answer _____ cans (2 marks)</p>		21.		
22.	<p>Four fractions are given below.</p> <p style="text-align: center;">$\frac{1}{3}$, $\frac{1}{4}$, $\frac{5}{6}$, $\frac{5}{12}$</p> <p>Which THREE of these fractions when added result in a whole number?</p> <p>Answer _____ (2 marks)</p>		22.		
23.	<p>A class is building 6 model houses with lollipop sticks. Each house requires 879 lollipop sticks. Lollipop sticks are sold in packs of 100. How many packs of sticks are needed to build these houses?</p> <p>Answer _____ (2 marks)</p>		23.		

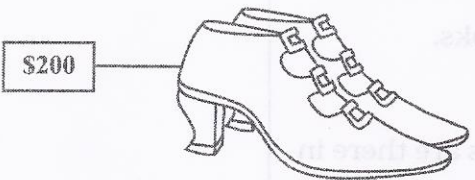
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	P
24.	<p>A class has 40 students. If 16 students are boys, what PERCENTAGE of the class is girls?</p> <p>Answer _____</p> <p style="text-align: right;">(2 marks)</p>		24.		
25.	<p>The diagram below shows two routes that Moe can walk to get from school to home.</p> <div style="text-align: center;"> </div> <p>How much LONGER is Route B than Route A?</p> <p>Answer _____ km</p> <p style="text-align: right;">(3 marks)</p>		25.		










No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
26.	<p>Mary has \$40.00. One half ($\frac{1}{2}$) of Mary's money is equal to $\frac{2}{3}$ of Susie's money.</p> <p>(a) How much money does Susie have?</p> <p>Answer \$ _____ (2 marks)</p> <p>(b) How much is $\frac{3}{8}$ of Mary's money?</p> <p>Answer \$ _____ (1 mark)</p>		26.		
27.	<p>In a town of 3 000 people, 40% are children.</p> <p>70% of the children are boys, how many girls are there in the town?</p> <p>Answer _____ (3 marks)</p>		27.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	P
28.	<p>A library has 1 200 books. Of these, $\frac{1}{4}$ are magazines and $\frac{2}{5}$ are story books. The remainder are text books.</p> <p>(a) How many magazines are there in the library?</p> <p>Answer _____ (1 mark)</p> <p>(b) How many text books are there in the library?</p> <p>Answer _____ (2 marks)</p>		28.		
DO NOT WRITE HERE			KC (5)	AT (10)	PS (5)
29.	<p>At a party 20 children each drank 250 millilitres (ml) of lemonade. How many LITRES of lemonade did they drink ALTOGETHER?</p> <p>Answer _____ litres (2 marks)</p>		29.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
30.	<p>SALE: Buy 1 pair of shoes and get 50% off the second pair.</p> <div style="text-align: center;">  </div> <p>Jenny bought 2 pairs of the shoes shown above at the sale. How much did she pay in all for BOTH pairs?</p> <p>Answer \$ _____ (2 marks)</p>		30.		
31.	<p>A book has 60 pages. Michael reads 3 pages in 2 minutes. How long will it take him to finish the book?</p> <p>Answer _____ (2 marks)</p>		31.		

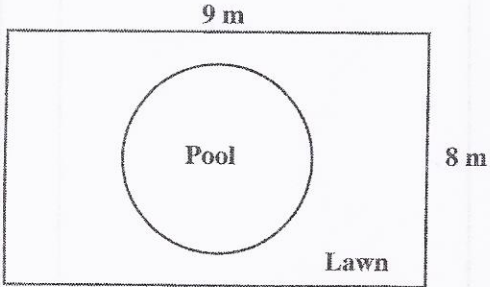
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	P
28.	<p>A library has 1 200 books. Of these, $\frac{1}{4}$ are magazines and $\frac{2}{5}$ are story books. The remainder are text books.</p> <p>(a) How many magazines are there in the library?</p> <p>Answer _____ (1 mark)</p> <p>(b) How many text books are there in the library?</p> <p>Answer _____ (2 marks)</p>		28.		
DO NOT WRITE HERE			KC (5)	AT (10)	PS (5)
29.	<p>At a party 20 children each drank 250 millilitres (ml) of lemonade. How many LITRES of lemonade did they drink ALTOGETHER?</p> <p>Answer _____ litres (2 marks)</p>		29.		
TOTAL (20)					

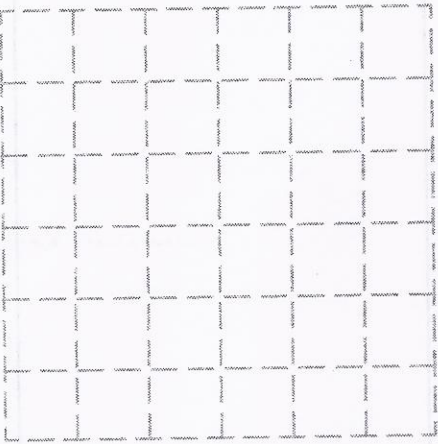
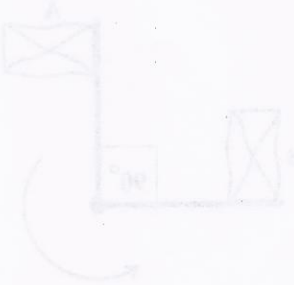
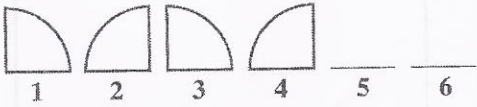
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
30.	<p>SALE: Buy 1 pair of shoes and get 50% off the second pair.</p>  <p>Jenny bought 2 pairs of the shoes shown above at the sale. How much did she pay in all for BOTH pairs?</p> <p>Answer \$ _____ (2 marks)</p>		30.		
31.	<p>A book has 60 pages. Michael reads 3 pages in 2 minutes. How long will it take him to finish the book?</p> <p>Answer _____ (2 marks)</p>		31.		

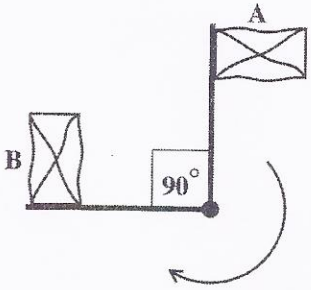
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here							
			KC	AT	PS					
32.	<p>The diagram below shows the cost of three stuffed toys.</p> <table border="1" data-bbox="418 590 922 779"><tr><td> \$45.00</td><td> \$40.00</td><td> \$30.00</td></tr><tr><td>POOH BEAR</td><td>TIGGER</td><td>PIGLET</td></tr></table> <p>Grandma has \$200. She buys stuffed toys for her grandchildren.</p> <p>(a) How much does Grandma pay for 2 Tiggers and 1 Pooh Bear?</p> <p>Answer \$ _____ (1 mark)</p> <p>(b) How many Piglets can she purchase with the REMAINING money?</p> <p>Answer _____ (2 marks)</p>	 \$45.00	 \$40.00	 \$30.00	POOH BEAR	TIGGER	PIGLET			
 \$45.00	 \$40.00	 \$30.00								
POOH BEAR	TIGGER	PIGLET								

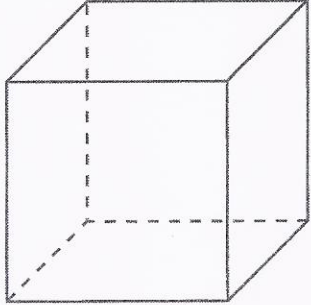
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
33.	<p>A square and a rectangle are shown below. The perimeter of the square is twice the perimeter of the rectangle.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center;">Square</div> <div style="margin-left: 20px;">8 cm</div> <div style="border: 1px solid black; width: 100px; height: 50px; display: flex; align-items: center; justify-content: center;">Rectangle</div> <div style="margin-left: 10px;">4 cm</div> </div> <p>(a) Calculate the perimeter of the square.</p> <p>Answer _____ cm (2 marks)</p> <p>(b) Calculate the length of ONE side of the square.</p> <p>Answer _____ cm (1 mark)</p>				

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
34.	<p>The total mass of mangoes and oranges in a bag is 2 kg. Each orange has a mass of 50 g and each mango has a mass of 200 g. The bag contains 6 mangoes.</p> <p>(a) Calculate the TOTAL mass of the mangoes.</p> <p>Answer _____ g (1 mark)</p> <p>(b) Calculate the number of oranges in the bag.</p> <p>Answer _____ (2 marks)</p>				


No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
35.	<p>In Mr Jerry's yard there is a pool with a lawn around it. The yard is 9 metres long and 8 metres wide as shown below.</p>  <p>(a) Calculate the area of the entire yard.</p> <p>Answer _____ m² (1 mark)</p> <p>(b) The area of the pool is $\frac{1}{3}$ of the area of the yard. Calculate the area of the lawn.</p> <p>Answer _____ m² (2 marks)</p>				
			35.		
DO NOT WRITE HERE			KC (4)	AT (10)	PS (4)
			TOTAL (18)		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
36.	<p>The grid below is made up of 1 cm squares. Draw an isosceles triangle with a HEIGHT of 4 cm on the grid.</p>  <p>(2 marks)</p>		36.		
37.	<p>Study the pattern below.</p>  <p>(a) Which movement transforms EACH shape to the next? Answer _____ (1 mark)</p> <p>(b) Complete the shape that should appear in Position 6. (1 mark)</p>				

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
38.	<p>The flag below was moved from Position A to Position B in the direction of the arrow.</p>  <p>(a) What FRACTION of a complete turn was made?</p> <p>Answer _____ (1 mark)</p> <p>(b) Through how many degrees was the flag turned?</p> <p>Answer _____ (1 mark)</p> <p>(c) The flag is moved 180° from Position B, draw its NEW position on the diagram above. (1 mark)</p>				
			38.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
			KC	AT	PS	
39.	<p>The diagram below shows a paper toy in the shape of a cube. The base is a square.</p>  <p>(a) How many faces does the paper toy have?</p> <p>Answer _____ (1 mark)</p> <p>(b) Draw the net of the paper toy.</p> <p style="text-align: right;">(2 marks)</p>					
			39.			
DO NOT WRITE HERE			KC (2)	AT (5)	PS (3)	TOTAL (10)

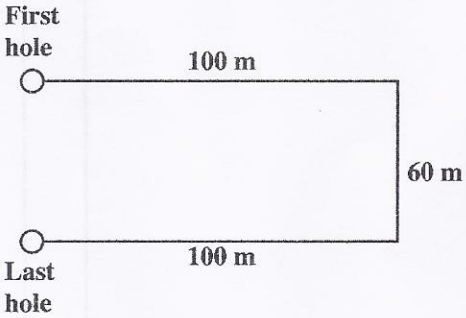
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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here														
			KC	AT	PS												
40.	<p>The table below shows Pat's scores on four of her class tests.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Subject</th> <th style="padding: 5px;">Scores</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Social Studies</td> <td style="padding: 5px; text-align: center;">77</td> </tr> <tr> <td style="padding: 5px;">Art</td> <td style="padding: 5px; text-align: center;">74</td> </tr> <tr> <td style="padding: 5px;">Science</td> <td style="padding: 5px; text-align: center;">81</td> </tr> <tr> <td style="padding: 5px;">Maths</td> <td style="padding: 5px; text-align: center;">78</td> </tr> <tr> <td style="padding: 5px;">English</td> <td style="padding: 5px; text-align: center;"><input style="width: 40px; height: 20px;" type="text"/></td> </tr> </tbody> </table> <p>Her average score on all five tests is 80. How much did she score in English?</p> <p>Answer _____ (2 marks)</p>	Subject	Scores	Social Studies	77	Art	74	Science	81	Maths	78	English	<input style="width: 40px; height: 20px;" type="text"/>		40.		
Subject	Scores																
Social Studies	77																
Art	74																
Science	81																
Maths	78																
English	<input style="width: 40px; height: 20px;" type="text"/>																
DO NOT WRITE HERE			KC (1)	AT (1)	PS (0)												
			TOTAL (2)														

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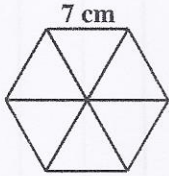

SECTION III

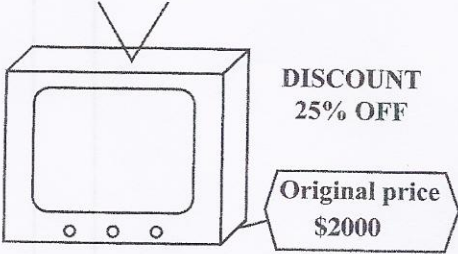
Answer ALL questions. Each question is worth 5 marks.
Show ALL working in the Working Column.

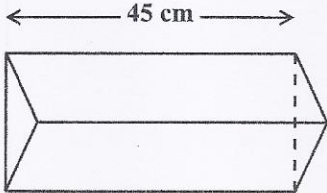
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
41.	<p>(a) Street lights along a straight road are 20 m apart. What is the distance between the first street light and the tenth street light?</p> <p>Answer _____ (2 marks)</p> <p>(b) A gardener decides to plant palm trees 10 m apart around a rectangular park. The park is 100 m long and 60 m wide. The diagram below shows where he digs the first and last holes for the first and last palm trees.</p>  <p>How many palm trees does he plant ALTOGETHER?</p> <p>Answer _____ (3 marks)</p>				
			41.		

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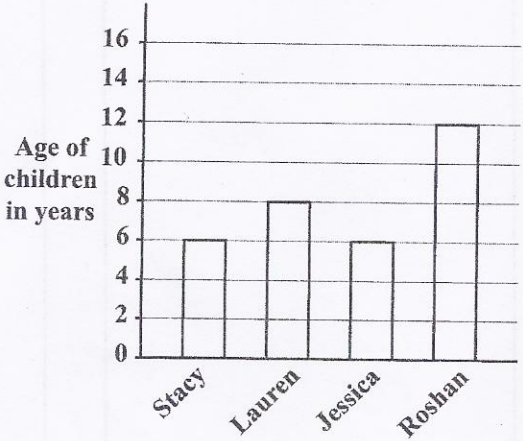
No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>																	
			KC	AT	PS															
42.	<p>The diagram below shows the number of points awarded for striking the colours on a dartboard.</p> <div style="text-align: center;"> </div> <p>(a) Tommy threw darts and struck green twice and red once. What was his TOTAL score?</p> <p>Answer _____ (2 marks)</p> <p>(b) Harry scored 100 points by striking each colour at least once. Complete the score sheet below to show how he scored the 100 points.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Colour</th> <th style="padding: 5px;">Number of times</th> <th style="padding: 5px;">Score</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Blue</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Green</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Red</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">60</td> </tr> <tr> <td style="padding: 5px;">Total</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">100 points</td> </tr> </tbody> </table> <p style="text-align: right;">(3 marks)</p>	Colour	Number of times	Score	Blue			Green			Red	2	60	Total		100 points	42.			
Colour	Number of times	Score																		
Blue																				
Green																				
Red	2	60																		
Total		100 points																		
DO NOT WRITE HERE			KC (3)	AT (5)	PS (2)	TOTAL (10)														

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
43.	<p>Ken and Rob each use six equilateral triangles to make the two shapes below. The triangles have sides which are 7 cm long.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Ken</p> </div> <div style="text-align: center;">  <p>Rob</p> </div> </div> <p>(a) What is the perimeter of Ken's shape?</p> <p>Answer _____ (2 marks)</p> <p>(b) How much longer is the perimeter of Rob's shape than Ken's shape?</p> <p>Answer _____ cm (3 marks)</p>		43.		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
44.	<p>Mr John bought the television set shown below.</p>  <p>(a) Calculate the discount in dollars.</p> <p>Answer \$ _____ (1 mark)</p> <p>(b) What was the selling price of the television set AFTER the discount was given?</p> <p>Answer \$ _____ (1 mark)</p> <p>(c) After the discount was given, Mr John paid VAT at 15%. How much VAT was paid?</p> <p>Answer \$ _____ (2 marks)</p> <p>(d) What was the FINAL price of the television set?</p> <p>Answer \$ _____ (1 mark)</p>				
			44.		
DO NOT WRITE HERE			KC (3)	AT (5)	PS (2)
			TOTAL (10)		

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
			KC	AT	PS	
45.	<p>The diagram below shows a triangular prism.</p>  <p>(a) How many faces of the prism are:</p> <p>(i) triangular?</p> <p>Answer _____ (1 mark)</p> <p>(ii) rectangular?</p> <p>Answer _____ (1 mark)</p> <p>(b) How many edges have a length of 45 cm?</p> <p>Answer _____ (1 mark)</p> <p>(c) The volume of the prism is 90 cm^3. It is cut into identical prisms each of volume 10 cm^3.</p> <p>What is the length of EACH of the smaller prisms?</p> <p>Answer _____ cm^3 (2 marks)</p>					
DO NOT WRITE HERE			KC (1)	AT (2)	PS (2)	TOTAL (5)

45.

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
46.	<p>The bar graph below shows the ages of four cousins.</p>  <p>(a) What is the mean age of the four children, in years?</p> <p>Answer _____ years (2 marks)</p> <p>(b) Both Lauren and Roshan were born in May. In May 2006 Lauren was six years old. In what year was Roshan born?</p> <p>Answer _____ (3 marks)</p>				
			46.		
DO NOT WRITE HERE			KC (1)	AT (2)	PS (2)
			TOTAL (5)		

END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.