

TRINIDAD AND TOBAGO  
SECONDARY ENTRANCE ASSESSMENT

ANSWER BOOKLET

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SECONDARY ENTRANCE ASSESSMENT

ANSWER BOOKLET

FILL IN ALL THE INFORMATION REQUESTED CLEARLY AND LEGIBLY

TEST CODE

0	4	2	3	4	0	1	1
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TEST CODE

0	4	2	3	4	0	1	1
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SUBJECT

MATHEMATICS 2013

SUBJECT

MATHEMATICS 2013

Please place your label here.

Please place your label here.

**READ THE FOLLOWING  
INSTRUCTIONS CAREFULLY:**

1. This test is divided into **THREE** sections.
2. Make sure you read the instructions 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.**

WRITE THE NAME OF YOUR SCHOOL BELOW:

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WRITE YOUR FULL NAME BELOW:

DATE OF BIRTH		
Day	Month	Year

SEX  MALE ☐  
 FEMALE ☐

DO NOT WRITE IN THIS SPACE

FOLDER NUMBER

--

DO NOT WRITE IN THIS SPACE

FOLDER NUMBER

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**Directions for the Mathematics Test**

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

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

**SECTION I** has 20 questions (Nos. 1 to 20).

**SECTION II** has 20 questions (Nos. 21 to 40).

**SECTION III** has 6 questions (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.

# SECTION I

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

No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>			
1.	Write in figures: Nine hundred and five thousand, and twelve  Answer _____		1.	KC	AT	PS
2.	<b>SUBTRACT:</b>  $\begin{array}{r} 1509 \\ - 846 \\ \hline \end{array}$ Answer _____		2.			
3.	Express 25% as a fraction in its LOWEST terms.  Answer _____		3.			
4.	Shade $\frac{2}{5}$ of the shape below.  <div data-bbox="300 1203 781 1350" style="border: 1px solid black; width: 300px; height: 70px; margin: 10px auto;"> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> </div> </div>		4.			
5.	<b>MULTIPLY:</b>  $6.03 \times 0.04$  Answer _____		5.			
6.	Write the number 263 to the NEAREST hundred.  Answer _____		6.			

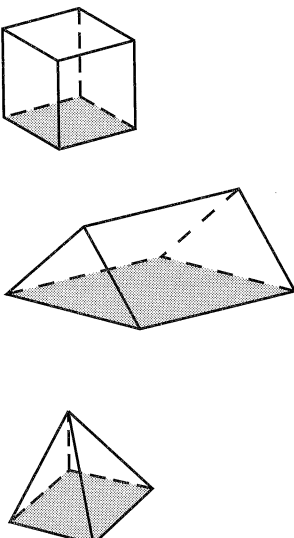
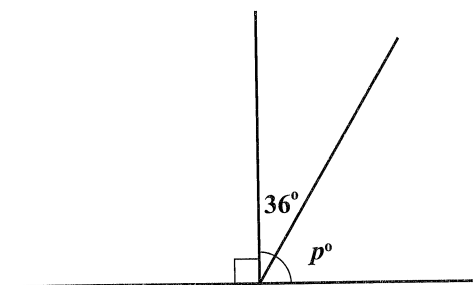
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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
7.	Complete the sequence below by filling in the missing fraction in the box.  $\frac{1}{3}, \frac{3}{6}, \boxed{\quad}, \frac{7}{12}$		7.	KC	AT	PS
8.	A netball team played 16 games. The team lost 3 games, drew 1 and won the others. What percentage of games did they win?  Answer _____ %		8.			
DO NOT WRITE HERE		KC (2)		AT (4)		PS (2)
		TOTAL (8)				
9.	Amy has the coins shown in the diagram below.  <div data-bbox="337 974 812 1335" data-label="Diagram"> </div> What is the TOTAL value of all the coins?  Answer \$_____		9.			
10.	5.08 kilometres = _____ metres					
11.	Allan sets out to run three laps without stopping. He starts at 10:15 a.m. and each lap takes 15 minutes. At what time does he finish?  Answer _____ a.m.		11.			

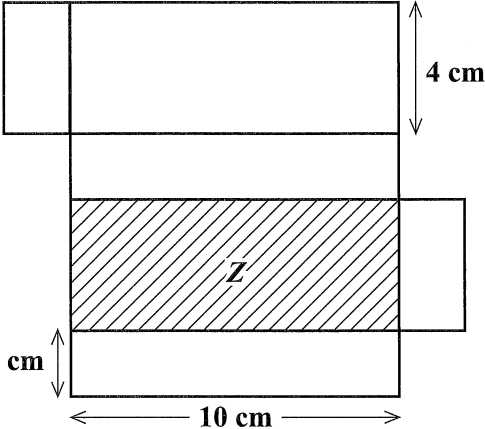
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No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>		
			KC	AT	PS
12.	<p>A bag of flour weighs 4.1 kg and a bag of corn meal weighs 3985 g. By how much is one bag heavier than the other?</p> <p>Answer _____ g</p>		12.		
13.	<p>How many pieces of string 25 cm long can be cut from a piece of string of length 2 m?</p> <p>Answer _____ pieces</p>		13.		
14.	<p>The clock shown below is 25 minutes slow.</p> <div data-bbox="370 793 706 1129" data-label="Image"> </div> <p>To which number should the longer hand point to show the correct time?</p> <p>Answer _____</p>		14.		
15.	<p>Maya buys some of the apples and plums advertised below.</p> <div data-bbox="289 1423 472 1541" data-label="Image"> </div> <p><b>Apples</b> 2 for \$3.00</p> <div data-bbox="521 1423 813 1541" data-label="Image"> </div> <p><b>Plums</b> 3 for \$2.00</p> <p>She buys 4 apples and pays with a \$10 bill. How many plums can she buy with the remainder of the money?</p> <p>Answer _____ plums</p>		15.		
<b>DO NOT WRITE HERE</b>			<b>KC (2)</b>		<b>AT (4)</b>
			<b>PS (1)</b>		<b>TOTAL (7)</b>

































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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
			KC	AT	PS
16.	<p>Circle the pyramid from the set of solids below.</p> 		16.		
17.	<p>The diagram shows three angles.</p>  <p>Calculate the value of <math>p</math>.</p> <p>Answer <math>p = \underline{\hspace{2cm}}</math> degrees</p>		17.		

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN			Do Not Write Here													
18.	<p>The diagram below shows the net of a cuboid.</p> <div></div> <p>What is the area of the shaded face, <i>Z</i>?</p> <p>Answer _____ cm<sup>2</sup></p>			KC	AT	PS												
			18.															
DO NOT WRITE HERE		KC (1)		AT (1)		PS (1)		TOTAL (3)										
19.	<p>The table below shows Adam’s cricket scores for five days in a week.</p> <table border="1"><thead><tr><th>Days of the Week</th><th>Cricket Scores</th></tr></thead><tbody><tr><td>Monday</td><td>9</td></tr><tr><td>Tuesday</td><td>11</td></tr><tr><td>Wednesday</td><td>17</td></tr><tr><td>Thursday</td><td>28</td></tr><tr><td>Friday</td><td>15</td></tr></tbody></table> <p>Calculate his mean score for that week.</p> <p>Answer _____</p>	Days of the Week	Cricket Scores	Monday	9	Tuesday	11	Wednesday	17	Thursday	28	Friday	15					
		Days of the Week	Cricket Scores															
Monday	9																	
Tuesday	11																	
Wednesday	17																	
Thursday	28																	
Friday	15																	
19.																		

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>												
			KC	AT	PS										
20.	<p>The table below shows the number of goals that a team scored in football games.</p> <table border="1" data-bbox="282 493 748 938"> <thead> <tr> <th>Games</th> <th>Goals Scored</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>    </td> </tr> <tr> <td>B</td> <td>     </td> </tr> <tr> <td>C</td> <td></td> </tr> <tr> <td>D</td> <td>    </td> </tr> </tbody> </table> <p>  4 goals   2 goals         </p> <p>The team scored a total of 42 goals. Complete the table to show the number of goals scored in Game C.</p>	Games	Goals Scored	A	  	B	   	C		D	  		20.		
Games	Goals Scored														
A	  														
B	   														
C															
D	  														
DO NOT WRITE HERE			KC (0)		AT (1)		PS (1)		TOTAL (2)						

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## SECTION II

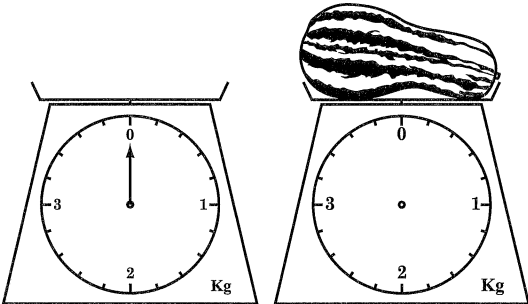
Each question is worth either 2 or 3 marks. Answer ALL questions.  
Show ALL working in the Working Column.

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
21.	Ian doubles a certain number and then adds 6. The result is 24. What is the number?  Answer _____ (2 marks)		21.	KC	AT	PS
22.	Susan had gained 20 points for being neat and tidy. On Friday, she lost 10% of these points for untidy work. How many points did she have left?  Answer _____ points (2 marks)		22.			
23.	Jack tried to climb 20 m up a coconut tree. For every 5 m he climbed, he fell back 2 m. How far up the tree would he have reached after falling 3 times?  Answer _____ m (2 marks)		23.			
24.	Dad had a piece of rope that was $4\frac{3}{5}$ m long. He cut $3\frac{1}{2}$ m of it to make a swing. What is the length of the remaining piece of rope?  Answer _____ m (2 marks)		24.			
25.	Mr Singh planted a tree. Each week, the tree grew by 0.24 m. How many weeks did the tree take to grow to 6 m?  Answer _____ weeks (3 marks)		25.			

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here												
26.	<p>Jasmine went to the market and purchased 32 fruits consisting of 6 apples, some oranges and some guavas. She purchased twice as many oranges as apples.</p> <p>She recorded her purchases as shown in the table below.</p> <p>(a) Complete the table.</p> <table><tr><td>Fruit</td><td>Number Purchased</td></tr><tr><td>Apples</td><td>6</td></tr><tr><td>(i) Oranges</td><td></td></tr><tr><td>(ii) Guavas</td><td></td></tr><tr><td>Total</td><td>32</td></tr></table> <p style="text-align: right;">(2 marks)</p> <p>(b) What percentage of the fruits purchased was apples?</p> <p style="text-align: right;">Answer _____ % (1 mark)</p>	Fruit	Number Purchased	Apples	6	(i) Oranges		(ii) Guavas		Total	32		KC	AT	PS
		Fruit	Number Purchased												
Apples	6														
(i) Oranges															
(ii) Guavas															
Total	32														
27.	<p>Four digits are shown below.</p> <div><div>3</div><div>9</div><div>8</div><div>7</div></div> <p>Using EACH digit only ONCE, write the</p> <p>(a) SMALLEST four-digit number</p> <p style="text-align: right;">Answer _____ (1 mark)</p> <p>(b) LARGEST four-digit EVEN number.</p> <p style="text-align: right;">Answer _____ (2 marks)</p>														
			26.												
			27.												

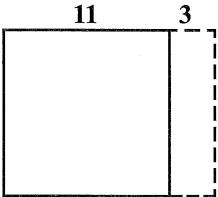
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No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>		
			KC	AT	PS
28.	<p>The product of two numbers is 9. One of them is <math>3\frac{3}{5}</math>. What is the other number?</p> <p>Answer _____</p> <p style="text-align: right;"><b>(3 marks)</b></p>		28.		
<div>DO NOT WRITE HERE</div> <div>KC (5)</div> <div>AT (10)</div>			<div>PS (5)</div> <div>TOTAL (20)</div>		
29.	<p>Sam bought 2 snacks at 65¢ each and 1 drink for \$1.25. What is his change from a \$5 note?</p> <p>Answer \$ _____</p> <p style="text-align: right;"><b>(2 marks)</b></p>		29.		
30.	<p>A pumpkin weighing 2.6 kilograms is placed on the scale below.</p> <div style="text-align: center;">  </div> <p>(a) Draw the new position of the pointer when the pumpkin is placed on the scale. <b>(1 mark)</b></p> <p>(b) How many GRAMS does the pumpkin weigh?</p> <p style="text-align: right;">Answer _____ g <b>(1 mark)</b></p>		30.		

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
				KC	AT	PS
31.	<p>A table and four chairs together cost \$540. The cost of each chair is \$70. Calculate the cost of the table.</p> <p style="text-align: right;">Answer \$ _____ (2 marks)</p>		31.			
32.	<p>Tom works for eight hours each day and is paid \$12 per hour.</p> <p>(a) If he works for five days, calculate the total amount that he is paid.</p> <p style="text-align: right;">Answer \$ _____ (2 marks)</p> <p>(b) When Tom works on Saturdays, he is paid per hour at 1½ times the week-day rate. How much is Tom paid per hour on a Saturday?</p> <p style="text-align: right;">Answer \$ _____ (1 mark)</p>		32.			
33.	<p>The cost price of a television is \$1200. VAT is calculated at 15% of the cost price.</p> <p>(a) Calculate the amount of VAT.</p> <p style="text-align: right;">Answer \$ _____ (1 mark)</p> <p>(b) Calculate the TOTAL amount that a customer pays for the television.</p> <p style="text-align: right;">Answer \$ _____ (1 mark)</p> <p>(c) Larry bought one of the televisions but later sold it for \$980. Calculate his loss as a percentage of the cost price.</p> <p style="text-align: right;">Answer _____ % (1 mark)</p>		33.			

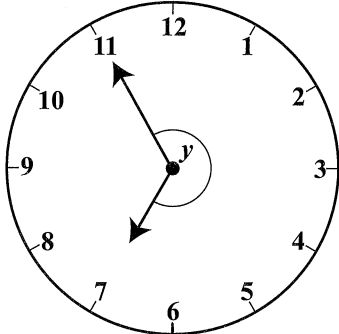
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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here			
34.	<p>The side of a square is 11 cm.</p> <p>(a) What is the area of the square?</p> <p style="text-align: center;">Answer _____ cm<sup>2</sup> (1 mark)</p> <p>(b) What is the perimeter of the same square?</p> <p style="text-align: center;">Answer: _____ cm (1 mark)</p> <p>(c) Two sides of the square are extended by 3 cm as shown below.</p> <div style="text-align: center;">  </div> <p style="text-align: center;">What is the area of the NEW shape?</p> <p style="text-align: center;">Answer _____ cm<sup>2</sup> (1 mark)</p>		34.	KC	AT	PS
35.	<p>\$8.25 was shared between Pam and her sister Rita in proportion to their ages. Pam is 12 years old and Rita is 8 years old.</p> <p>(a) Express their ages as a ratio in its SIMPLEST form.</p> <p style="text-align: center;">Answer _____ (1 mark)</p> <p>(b) Calculate the amount of money EACH girl receives.</p> <p style="text-align: center;">Answer Rita \$ _____ Pam \$ _____ (2 marks)</p>					
DO NOT WRITE HERE		KC (4)		AT (10)		PS (4)
	TOTAL (18)					

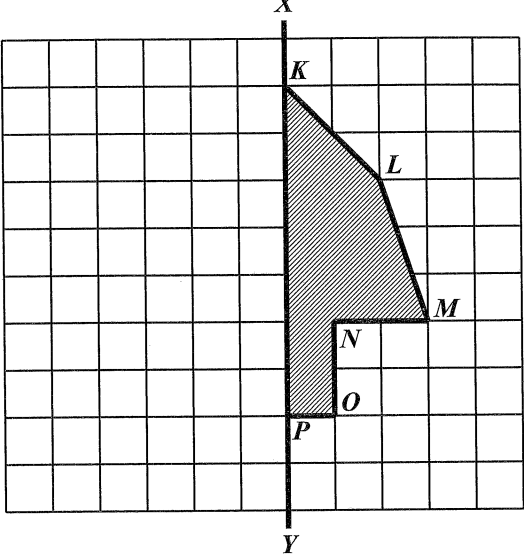
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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here											
36.	<p>(a) Draw a net of a cube in the space provided below.</p> <p style="text-align: right;">(1 mark)</p> <p>(b) Complete the table below.</p> <table><tr><th>Shape</th><th>Edges</th><th>Vertices</th><th>Faces</th></tr><tr><td>Cube</td><td></td><td>8</td><td>6</td></tr></table> <p style="text-align: right;">(1 mark)</p>	Shape	Edges	Vertices	Faces	Cube		8	6			KC	AT	PS
		Shape	Edges	Vertices	Faces									
Cube		8	6											
36.														

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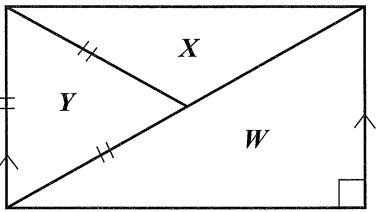
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
37.	<p>The angle formed between the hands of the clock shown below is marked with 'y'.</p>  <p>(a) Circle the term listed below that BEST describes angle y.</p> <p>Right angled; acute; obtuse; reflex</p> <p style="text-align: right;"><b>(1 mark)</b></p> <p>(b) Complete the following statement:</p> <p>Angle y measures _____ degrees.</p> <p style="text-align: right;"><b>(1 mark)</b></p>		37.	KC	AT

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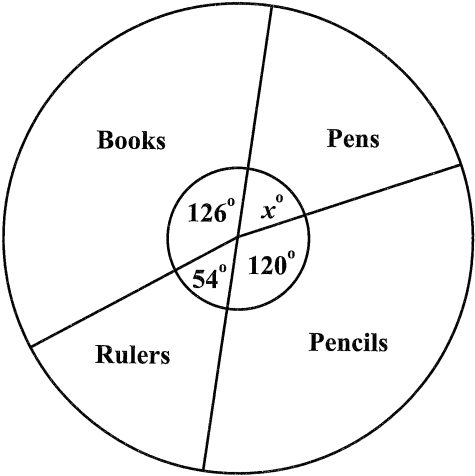
No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
				KC	AT
38.	 <p>Draw the image of the shape KLMNOP such that XY is a line of symmetry. <b>(3 marks)</b></p>		38.		

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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
				KC	AT
				PS	
39.	<p>The diagram below shows three triangles labelled W, X and Y. The line segments marked with the double strokes (  ) are equal in length.</p>  <p>(a) Which triangle is</p> <p>(i) right-angled?</p> <p>Answer _____ (1 mark)</p> <p>(ii) equilateral?</p> <p>Answer _____ (1 mark)</p> <p>(b) What type of quadrilateral is the whole figure (W, X and Y combined)?</p> <p>Answer _____ (1 mark)</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									
40.	<p>The pie chart below shows how a budget of \$540 was spent on certain school supplies.</p> <div></div> <p>How many dollars were spent on pens?</p> <p>Answer \$ _____ (2 marks)</p>			KC	AT	PS						
			40.									
DO NOT WRITE HERE		KC (1)		AT (1)			PS (0)		TOTAL (2)			

### SECTION III

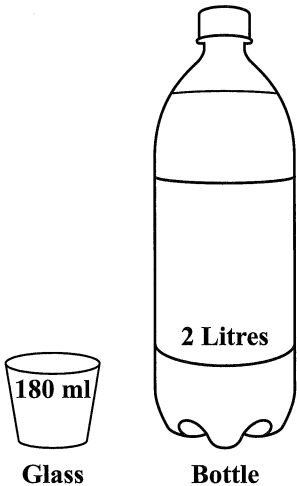
**Each question is worth 5 marks. Answer ALL questions.  
Show ALL working in the Working Column.**

No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>		
41.	<p>Mr Green bought a box of mangoes. 60% were ripe, 25% were green and the remainder had to be thrown away. The box contained 300 mangoes.</p> <p>(a) How many mangoes were ripe?</p> <p style="text-align: right;">Answer _____ mangoes <b>(1 mark)</b></p> <p>(b) How many mangoes had to be thrown away?</p> <p style="text-align: right;">Answer _____ mangoes <b>(2 marks)</b></p> <p>(c) Mr Green paid \$60 for the box of mangoes. Calculate the amount of money he lost.</p> <p style="text-align: right;">Answer \$ _____ <b>(2 marks)</b></p>			KC	AT
			41.		

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
42.	<p>There are 168 students in a school. There are twice as many girls as there are boys.</p> <p>(a) Calculate the number of girls in the school.</p> <p>Answer _____ girls (2 marks)</p> <p>(b) The students are to be divided into 7 classes so that each class has the same number of girls and the same number of boys.</p> <p>Calculate the number of girls and the number of boys in EACH class.</p> <p>Answer _____ girls _____ boys (2 marks)</p> <p>(c) Apples are sold in boxes each containing one dozen. How many boxes will the teacher have to buy so that EACH student receives ONE apple?</p> <p>Answer _____ boxes (1 mark)</p>		KC	AT	PS
			42.		
DO NOT WRITE HERE			KC (3)		AT (5)
			PS (2)	TOTAL (10)	

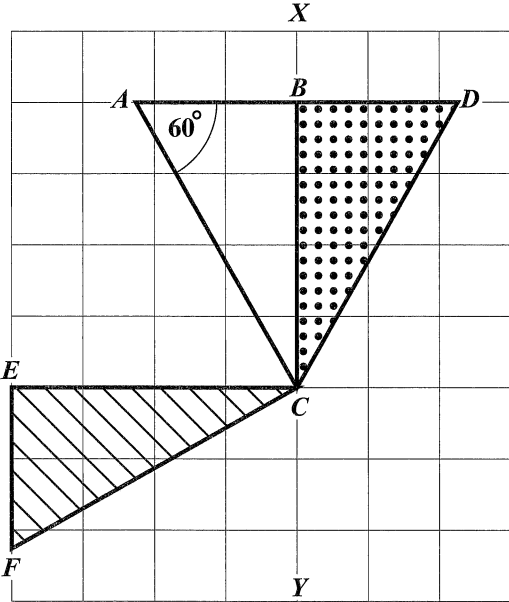
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No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here		
43.	<p>The bottle in the diagram holds 2 litres of soda when full.</p> <div><div><p>Glass                      Bottle</p></div><p>Jita fills 4 glasses with 180 ml of soda.</p><p>(a) How many litres of soda are left in the bottle?</p><p>Answer _____ litres (3 marks)</p><p>(b) How many MORE full glasses can she pour from the remaining soda?</p><p>Answer _____ glasses (2 marks)</p></div>		KC	AT	PS

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No.	TEST ITEMS	WORKING COLUMN	<i>Do Not Write Here</i>											
44.	<p>The price list in a cafeteria is shown below.</p> <table border="1" data-bbox="360 428 790 709"> <thead> <tr> <th colspan="2">Price List</th> </tr> </thead> <tbody> <tr> <td>Hot dog</td> <td>\$5.50</td> </tr> <tr> <td>Drink</td> <td>\$2.25</td> </tr> <tr> <td>Apple</td> <td>\$1.75</td> </tr> </tbody> </table> <p>Sean bought 2 hot dogs, a drink and 2 apples. Sade bought a hot dog, 3 drinks and an apple.</p> <p>(a) What is the TOTAL amount spent by Sean and Sade?</p> <p style="text-align: right;">Answer \$ _____ (2 marks)</p> <p>(b) How much more than Sade did Sean spend?</p> <p style="text-align: right;">Answer \$ _____ (2 marks)</p> <p>(c) Which item(s) can be bought with the difference in the amount spent by Sean and Sade?</p> <p style="text-align: right;">Answer _____ (1 mark)</p>	Price List		Hot dog	\$5.50	Drink	\$2.25	Apple	\$1.75		44.	KC	AT	PS
Price List														
Hot dog	\$5.50													
Drink	\$2.25													
Apple	\$1.75													
DO NOT WRITE HERE			KC (3)		AT (5)		PS (2)	TOTAL (10)						

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here							
45.	<p>The positions of triangles ABC, DBC and FEC are shown below.</p> 		KC	AT	PS					
	<p>(a) What term is used to describe the movement of triangle ABC to the position of triangle FEC?</p> <p>Answer _____</p> <p>(1 mark)</p> <p>(b) The triangle ABC moves to the position of triangle DBC. Describe the movement FULLY.</p> <p>Answer _____</p> <p>(2 marks)</p> <p>(c) What type of triangle is the combined shape, triangle ADC?</p> <p>Answer _____</p> <p>(2 marks)</p>		45.							
DO NOT WRITE HERE			KC (1)		AT (2)		PS (2)		TOTAL (5)	

GO ON TO THE NEXT PAGE

No.	TEST ITEMS	WORKING COLUMN	Do Not Write Here																	
46.	<p>The heights of a group of students in Standard 1 are given in the table below.</p> <table border="1"> <thead> <tr> <th>Name of Student</th> <td>Amina</td> <td>Betty</td> <td>Jon</td> <td>Avi</td> <td>Ela</td> <td>Sunil</td> </tr> <tr> <th>Height (cm)</th> <td>75</td> <td>64</td> <td>84</td> <td>86</td> <td>47</td> <td>64</td> </tr> </thead></table> <p>(a) What is the modal height?</p> <p style="text-align: right;">Answer _____ cm (1 mark )</p> <p>(b) Calculate the mean height of the group.</p> <p style="text-align: right;">Answer _____ cm (2 marks)</p> <p>(c) Amina left the group. What is the mean height of the new group?</p> <p style="text-align: right;">Answer _____ cm (2 marks)</p>	Name of Student	Amina	Betty	Jon	Avi	Ela	Sunil	Height (cm)	75	64	84	86	47	64			KC	AT	PS
Name of Student	Amina	Betty	Jon	Avi	Ela	Sunil														
Height (cm)	75	64	84	86	47	64														
			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.