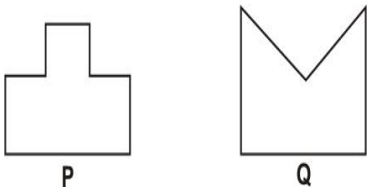
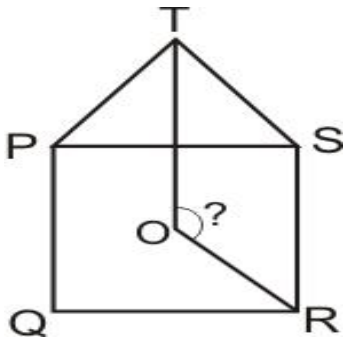
Set-6

<table>
<tr><th>Q. N</th><th>Folder Number & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option - A,B,C,D)</th></tr>
<tr><td>1</td><td rowspan="2">2_11 Mathematics 4421</td><td>Understanding Quadrilateral</td><td>If the measure of one angle of an isosceles triangle is 40^0, another angle of the triangle CANNOT measure</td><td></td><td>C</td></tr>
<tr><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>40^0</td><td>70^0</td><td>80^0</td><td>100^0</td></tr></table></td></tr>
<tr><td>2</td><td rowspan="2">2_11 Mathematics 4424</td><td>Understanding Quadrilateral</td><td>Kusum drew m figures like P on a page 1 and figure Q on page 2.

Compared to page 2, how many more straight lines are there on page 1</td><td>  </td><td>D</td></tr>
<tr><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>3</td><td>3m</td><td>8m - 1</td><td>8m - 5</td></tr></table></td></tr>
<tr><td>3</td><td>2_11 Mathematics 5290</td><td>Understanding Quadrilateral</td><td>The roads connecting the houses of Ravi, Sunil, Kapil and Roger form a quadrilateral as shown here. Let us refer to the quadrilateral as KLMN. It is not known which corner is K, which is L, etc.</td><td></td><td>A</td></tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>It is known that ∠ K

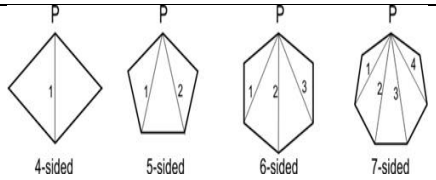
+ ∠ M > 180° and that ∠ L is not the smallest angle of the quadrilateral.</td><td></td><td></td></tr>
<tr><td></td><td></td><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>Ravi</td><td>Sunil</td><td>Kapil</td><td>Roger</td></tr></table></td></tr>
<tr><td>4</td><td>2_11 Mathematics 4448</td><td>Understanding Quadrilateral</td><td>In the figure shown below, PQRS is a square and TPS is an equilateral triangle. The bisectors of angle PTS and angle QRS meet at point O.

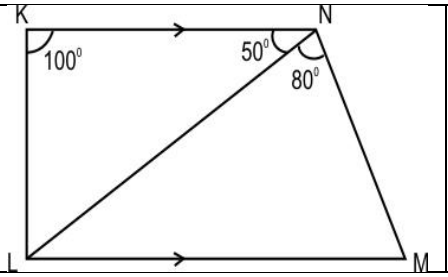
What is the measure of angle TOR?</td><td> 
</td><td>A</td></tr>
<tr><td></td><td></td><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>135^0</td><td>140^0</td><td>145^0</td><td>150^0</td></tr></table></td></tr>
<tr><td>5</td><td>2_11 Mathematics 4450</td><td>Understanding Quadrilateral</td><td>Venu has a rectangular sheet of cardboard:

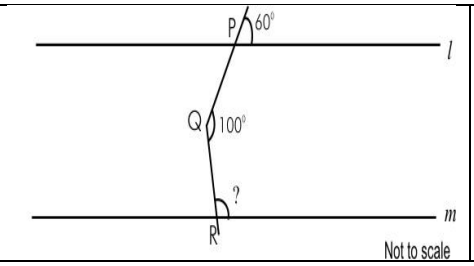
With a single straight cut, he cuts the rectangular sheet into two pieces.

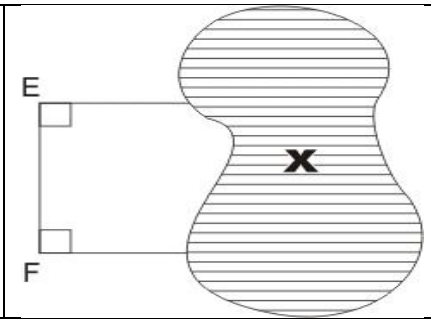
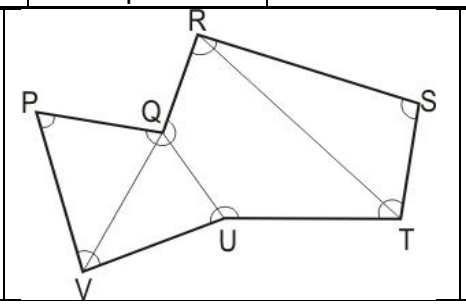
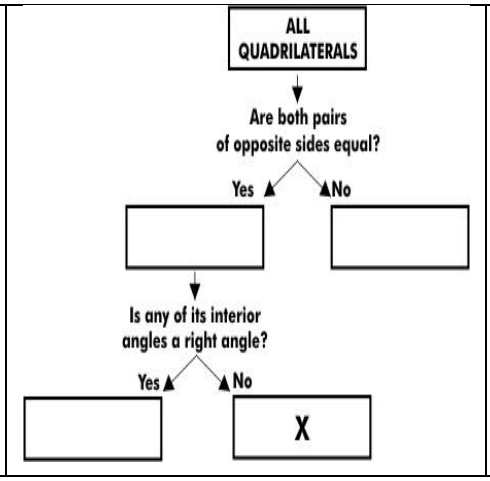
The total number of corners on the two resulting pieces COULD be</td><td> </td><td>C</td></tr>
</table>

<table>
<tr><td></td><td></td><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>4</td><td>5</td><td>7</td><td>10</td></tr></table></td></tr>
<tr><td rowspan="2">6</td><td rowspan="2">2_10 Mathematics 5866</td><td>UNDERSTANDING QUADRILATERALS</td><td>Look at the polygons shown below. In each of them, ALL the diagonals drawn from ONE vertex are shown.

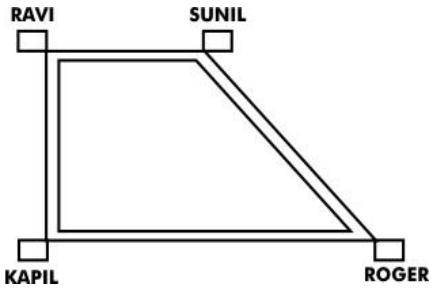
From these we can say that the number of diagonals that can be drawn from any one vertex of a 20-sided polygon is</td><td> 
</td><td>C</td></tr>
<tr><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>20</td><td>19</td><td>17</td><td>16</td></tr></table></td></tr>
<tr><td rowspan="2">7</td><td rowspan="2">2_10 Mathematics 5880</td><td>UNDERSTANDING QUADRILATERALS</td><td>The figure given is NOT to scale.)

If KN | | LM, the sides of KLMN in increasing order are</td><td> 
</td><td>B</td></tr>
<tr><td colspan="4"><table><tr><th colspan="4">AnswerOptions</th></tr><tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr><tr><td>KL, KN, MN, LM</td><td>KN, KL, MN, LM</td><td>MN, KL, KN, LM</td><td>KN, MN, KL, LM</td></tr></table></td></tr>
<tr><td>8</td><td>2_10 Mathematics 5881</td><td>UNDERSTANDING QUADRILATERALS</td><td>In the above figure, lines l and m are parallel.

What is the measure of ∠R?</td><td> 
</td><td>C</td></tr>
</table>

		AnswerOptions			
		Option A	Option B	Option C	Option D
		100°	120°	120°	160°
9	**3_18 Mathematics 3358**	UNDERSTANDING QUADRILATERALS	A part of quadrilateral EFGH is covered with an object X. Which of the following is DEFINITELY true about quadrilateral EFGH?		D
		AnswerOptions			
		Option A	Option B	Option C	Option D
		It must be a parallelogram	It must be a rectangle	It must be a square	none of the above
10	**3_18 Mathematics 3376**	UNDERSTANDING QUADRILATERALS	What is the sum of all the interior angles (marked in the figure) of polygon PQRSTUV		D
		AnswerOptions			
		Option A	Option B	Option C	Option D
		360^0	420^0	720^0	900^0
11	**1_4 Mathematics 7598**	UNDERSTANDING QUADRILATERALS	The chart given below puts quadrilaterals in different boxes according to certain conditions. According to the conditions in this chart, which type of quadrilaterals will be placed in the box marked X?		A

<table>
<tr><td></td><td></td><td colspan="4"><table>
<tr><th colspan="4">AnswerOptions</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>all those parallelograms which are not rectangles</td><td>all those rhombuses which are not squares</td><td>all rectangles</td><td>all those rectangles which are not squares</td></tr>
</table></td></tr>
<tr><td rowspan="2">12</td><td rowspan="2">1_4 Mathematics 7601</td><td>UNDERSTANDING QUADRILATERALS</td><td>The roads connecting the houses of Ravi, Sunil, Kapil and Roger form a quadrilateral as shown here. Let us refer to the quadrilateral as KLMN. It is not known which corner is K, which is L, etc.

It is known that ∠ K + ∠ M > 180° and that ∠ L is not the smallest angle of the quadrilateral.</td><td> 
</td><td>A</td></tr>
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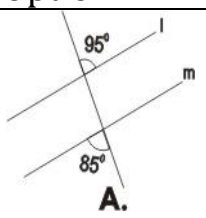
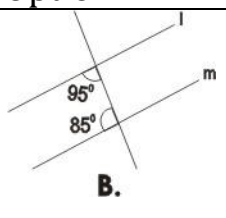
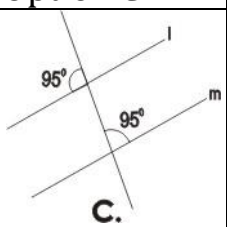
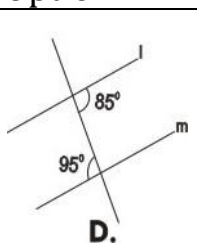
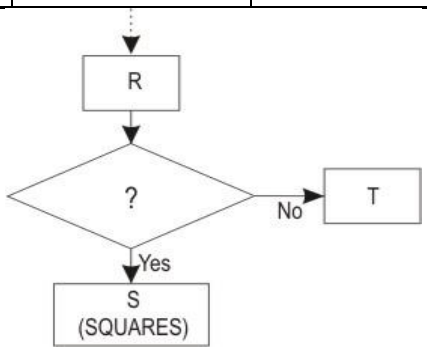
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>Ravi</td><td>Sunil</td><td>Kapil</td><td>Roger</td></tr>
</table></td></tr>
<tr><td rowspan="2">13</td><td rowspan="2">2_11 Mathematics 4429</td><td>UNDERSTANDING QUADRILATERALS</td><td>A parallelogram MNOP will be a rectangle when diagonals MO and NP</td><td></td><td>A</td></tr>
<tr><td colspan="4"><table>
<tr><th colspan="4">AnswerOptions</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>are equal</td><td>are perpendicular</td><td>bisect each other</td><td>intersect at an angle of 45^0</td></tr>
</table></td></tr>
<tr><td>14</td><td>5_26 1666</td><td>Understanding Quadrilaterals</td><td>According to the angle measures given, in which figure are lines l and m parallel? (The figures are NOT to</td><td></td><td>B</td></tr>
</table>

			scale)		

AnswerOptions			
Option A	Option B	Option C	Option D
			

15	5_26 1699	Unders tanding Quadril aterals	Nadeem wants to extend the flowchart further from R to specify whether a given quadrilateral is a square. What question should he put in the box below R?		C

AnswerOptions			
Option A	Option B	Option C	Option D
Are all the angles in the figure right angles?""	Are the opposite sides equal?""	Are any two adjacent sides of the figure equal?" "	Are the opposite angles of the figure equal?""