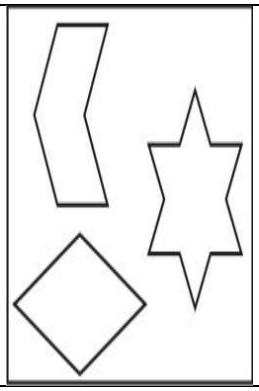
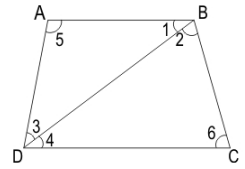
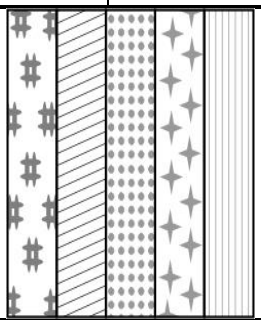
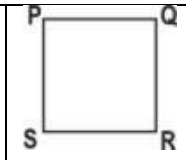
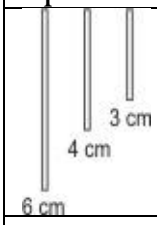
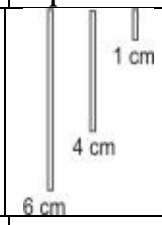
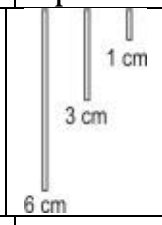
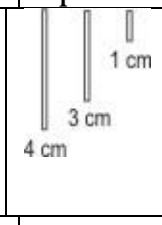
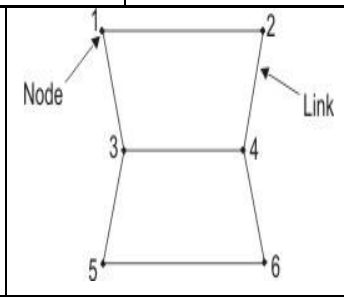
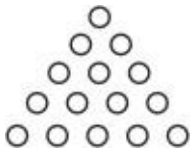
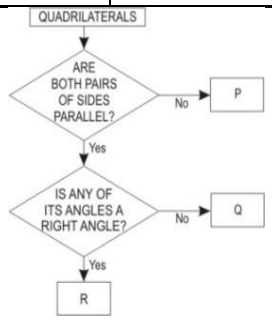
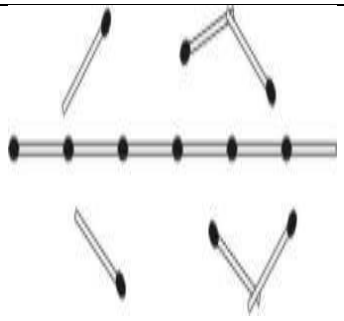
# Set-7

<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>3_192744</td><td>Understanding Quadrilaterals</td><td>Look at the group of figures in the box here. Which of the following properties fit ALL the figures in the box?</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>All the sides are equal and at least one pair of sides is parallel</td><td>At least one pair of sides is parallel and all the interior angles are acute</td><td>At least one pair of sides is parallel and all the angles are equal</td><td>All the sides are equal and all the interior angles are obtuse</td></tr>
</table></td></tr>
<tr><td>2</td><td>3_192747</td><td>Understanding Quadrilaterals</td><td>Some students are measuring and examining diagonal properties of quadrilaterals in their Geometry class. They have so far measured four quadrilaterals given in a worksheet and recorded their findings in a table as shown below. Which of the quadrilaterals measured by the students is a rectangle?<table>
<tr><th>Name of the quadirateral</th><th>Diagonals bisect each other</th><th>Diagonals are equal</th><th>Diagonals are perpendicular</th></tr>
<tr><td>EFGH</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>IJKL</td><td>No</td><td>No</td><td>No</td></tr>
<tr><td>MNOP</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>QRST</td><td>Yes</td><td>Yes</td><td>No</td></tr>
</table></td><td></td><td>D</td></tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| | | **Answer Options**<br>Option A: EFGH<br>Option B: IJKL<br>Option C: UKLNOP<br>Option D: MNOP | | | |
| 3 | 5_27 8386 | Understanding Quadrilaterals | ABCD is a trapezium with AB parallel to CD. Which of the following CANNOT be concluded based on this? |  | B |
| | | **Answer Options**<br>Option A: $\angle 1 = \angle 4$<br>Option B: $\angle 2 = \angle 3$<br>Option C: $\angle 1 + \angle 2 + \angle 6 = 180^0$<br>Option D: $\angle 3 + \angle 4 + \angle 5 = 180^0$ | | | |
| 4 | 5_27 8416 | Understanding Quadrilaterals | Five identical rectangular pieces of cloth of different prints when arranged as shown form a square patch. If the perimeter of each rectangular piece is 48 cm, what is the perimeter of the square patch? |  | D |
| | | **AnswerOptions**<br>Option A: 240cm<br>Option B: 120cm<br>Option C: 96cm<br>Option D: 80cm | | | |
| 5 | 5_28 10047 | Understanding Quadrilaterals | Rahul and Tapan are playing a guessing game with shapes. Rahul draws a quadrilateral and answers Tapan's questions as follows:<br>Tapan: Are all its sides equal?<br>Rahul: Yes.<br>Tapan: Are its diagonals equal?<br>Rahul: No. Which of the following is the MOST accurate description of the shape that Rahul has drawn? | | D |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **Answer Options** | | | | |
| | | Option A | Option B | Option C | Option D | |
| | | Square | Rectangle | Parallelogram | Rhombus | |
| 6 | 5_28 10065 | Understanding Quadrilaterals | An equilateral triangle TSR is to be drawn on base SR of square PQRS. Where will point T lie? |  | | B |
| | | **Answer Options** | | | | |
| | | Option A | Option B | Option C | Option D | |
| | | Inside square PQRS | On the midpoint of side PQ | Exactly on point P | Outside the square, over the top of PQ | |
| 7 | 5_29 11377 | Understanding Quadrilaterals | Using which set of sticks can a triangle be formed? | | | A |
| | | **Answer Options** | | | | |
| | | Option A | Option B | Option C | Option D | |
| | |  |  |  |  | |
| 8 | 5_29 11398 | Understanding Quadrilaterals | The figure below is called a network. It is made up of links and nodes. The aim is to start from a node and complete a full route of the links WITHOUT REPEATING ANY LINK (though a node may be repeated). Is it possible to do this? |  | | C |
| | | **Answer Options** | | | | |
| | | Option A | Option B | Option C | Option D | |
| | | It is possible starting from any node. | It is possible only if we start from nodes 1 or 2 | It is possible only if we start from nodes 3 or 4 | It is not possible. | |

<table>
<tr><td>9</td><td>5_29<br>12340</td><td>Understanding Quadrilaterals</td><td>A triangular array is formed by placing 15 identical plasticchips. The LEAST number of chips that have to be moved to INVERT the triangle (to an upside-down arrangement) is</td><td>  </td><td>C</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>10</td><td>7</td><td>5</td><td>4</td></tr><tr><td></td><td></td><td></td><td></td></tr></table></td></tr>
<tr><td>10</td><td>5_26<br>1698</td><td>Understanding Quadrilateral</td><td>According to Nadeem's classification, which box or boxes would contain Parallelograms?<br>Answer the question based on the given information.<br>Nadeem is drawing a flowchart to classify quadrilaterals.</td><td> 
</td><td>B</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>both P and Q</td><td>both Q and R</td><td>only Q</td><td>only R</td></tr></table></td></tr>
<tr><td>11</td><td>5_28<br>10063</td><td>Practical Geometry</td><td>Qadir wanted to form a triangle with exactly 12 identical matchsticks, without bending or breaking any. He makes one side of the triangle with 6 matches. How many matchsticks should he use for the other two sides (respectively)?</td><td>  </td><td>D</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>3 matchsticks, 3 matchsticks</td><td>4 matchsticks, 2 matchsticks</td><td>5 matchsticks, 1 matchstick</td><td>He will not be able to make a triangle.</td></tr></table></td></tr>
</table>

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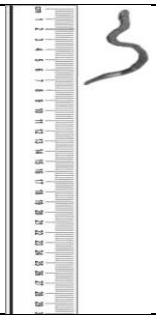
|---|---|---|---|---|---|
| 12 | 5_28 10041 | Practical Geometry | The length of the worm shown next to the ruler below is about |  | B |

| AnswerOptions | | | |
|---|---|---|---|
| Option A | Option B | Option C | Option D |
| 7.5cm | 10cm | 15cm | 22.5 |

| | | | | | |
|---|---|---|---|---|---|
| 13 | 5_29 11369 | Square and Square roots | What number should come in the box to make the following statement true? $3^4+3^2=9\ x\square$ | | C |

| AnswerOptions | | | |
|---|---|---|---|
| Option A | Option B | Option C | Option D |
| 4 | 7 | 10 | 81 |

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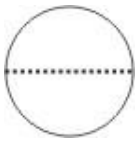
| 14 | 5_26 Mathematics 1670 | Comparing Quantities | What percent of figure 1is figure 2? | Fig. 1  Fig. 2 | C |

| AnswerOptions | | | |
|---|---|---|---|
| Option A | Option B | Option C | Option D |
| 33% | 150% | 200% | 300% |

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|---|---|---|---|---|---|
| 15 | 5_26 Mathematics 1671 | Comparing Quantities | To boost sales, a car company slashed the price of a particular model by one eighth from the existing price of Rs. 5.26 lakhs. The price was brought down by about | | D |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |

| AnswerOptions | | | |
|---|---|---|---|
| Option A | Option B | Option C | Option D |
| Rs 4400 | Rs 6600 | Rs 44000 | Rs 66000 |