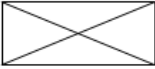


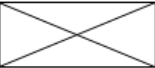

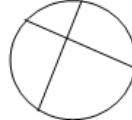
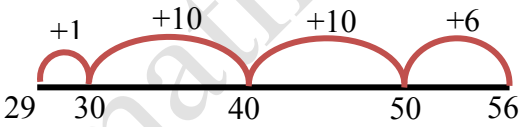

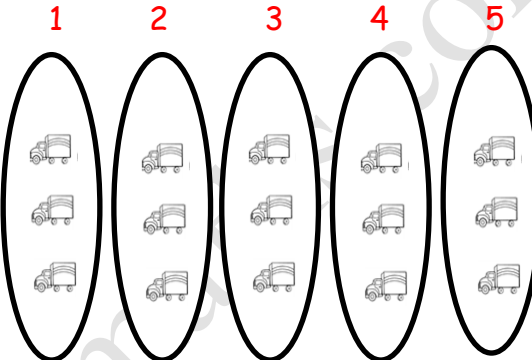


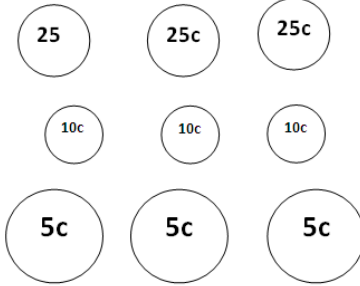
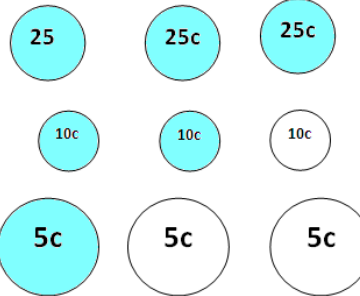
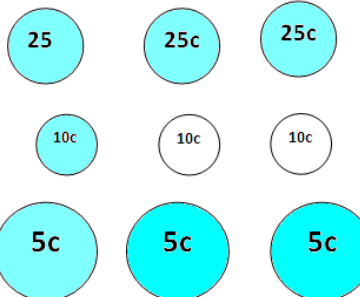
NATIONAL TEST 2013
Mathematics – Standard I

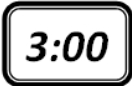


| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> | | | | | | | | | | | |
|------|--|--|--------------------------|------|---|------|------|---|---|---|---|---|---|--|
| 1. | <p>Write in words the number 27.</p> <p>Answer: Twenty seven</p> | <p>The number is 27.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 0 10px;">Tens</td> <td>Ones</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">7</td> </tr> </table> <p>2 tens is $2 \times 10 = 20 =$ twenty 7 ones is $7 \times 1 = 7 =$ seven</p> <p>27 in words is twenty seven</p> | Tens | Ones | 2 | 7 | | | | | | | | |
| Tens | Ones | | | | | | | | | | | | | |
| 2 | 7 | | | | | | | | | | | | | |
| 2. | <p>Order the numbers from the smallest to the largest.</p> <p style="text-align: center;">63 56 65</p> <p>Answer:</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 10px; margin: 0 5px;">56</td> <td style="border: 1px solid black; padding: 2px 10px; margin: 0 5px;">63</td> <td style="border: 1px solid black; padding: 2px 10px; margin: 0 5px;">65</td> </tr> </table> | 56 | 63 | 65 | <p>The tens digit of the numbers are 6, 5 and 6. 5 is the smallest of the three. Therefore, the number that starts with 5, which is 56, is the smallest number.</p> <p>The remaining two numbers are 63 and 65. They both have the same tens digit. Their ones digit are 3 and 5 and 3 is smaller than 5. So 63 is smaller than 65.</p> <table border="1" style="margin-left: auto; margin-right: auto; text-align: center;"> <thead> <tr> <th style="background-color: #fce4d6;">Tens</th> <th style="background-color: #e2efda;">Ones</th> </tr> </thead> <tbody> <tr> <td style="background-color: #fce4d6;">5</td> <td style="background-color: #e2efda;">6</td> </tr> <tr> <td style="background-color: #fce4d6;">6</td> <td style="background-color: #e2efda;">3</td> </tr> <tr> <td style="background-color: #fce4d6;">6</td> <td style="background-color: #e2efda;">5</td> </tr> </tbody> </table> <p>The numbers from the smallest to the largest are 56, 63 and 65.</p> | Tens | Ones | 5 | 6 | 6 | 3 | 6 | 5 | |
| 56 | 63 | 65 | | | | | | | | | | | | |
| Tens | Ones | | | | | | | | | | | | | |
| 5 | 6 | | | | | | | | | | | | | |
| 6 | 3 | | | | | | | | | | | | | |
| 6 | 5 | | | | | | | | | | | | | |

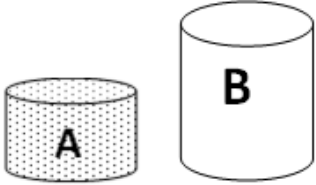
| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> | | | | | | | | | | |
|-----|---|---|--------------------------|---|---|--|---|---|---|---|---|---|--|
| 3. | <p>Add 54 and 38.</p> <p>Answer: 92</p> | <table border="1" style="display: inline-table; margin-right: 10px;"> <tr><td>T</td><td>O</td></tr> <tr><td>1</td><td></td></tr> <tr><td>5</td><td>4</td></tr> <tr><td>3</td><td>8</td></tr> <tr><td>9</td><td>2</td></tr> </table> <p>Adding the ones $4 + 8 = 12$ $= 1$ ten and 2 ones</p> <p>Adding the tens $5 + 3 + 1 = 9$</p> <p>$54 + 38 = 50 + 4 + 30 + 8$ $= 50 + 30 + 4 + 8$ $= 80 + 12$ $= 80 + 10 + 2$ $= 90 + 2$ $= 92$</p> | T | O | 1 | | 5 | 4 | 3 | 8 | 9 | 2 | |
| T | O | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| 5 | 4 | | | | | | | | | | | | |
| 3 | 8 | | | | | | | | | | | | |
| 9 | 2 | | | | | | | | | | | | |
| 4. | <p>Shade the whole with four equal parts.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Answer:</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> | <p>All the shapes are divided into 4 parts.</p> <p>Only the square is divided into 4 equal parts.</p> <p>Hence, the square is shaded.</p> | | | | | | | | | | | |

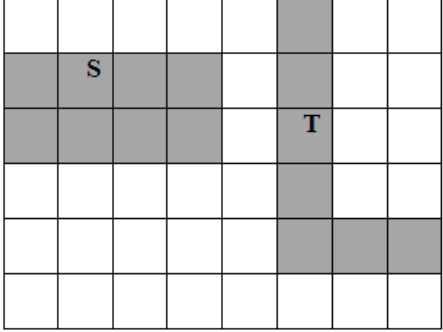

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> | | | | | | | | | | |
|--------------|---|---|--------------------------|---|---|----|--------------|--------------|---|---|---|---|--|
| 5. | <p>From 56, take 29.</p> <p>Answer: 27</p> | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>T</td><td>O</td></tr> <tr><td>4</td><td>16</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>2</td><td>9</td></tr> <tr><td>2</td><td>7</td></tr> </table> <p style="text-align: center;">-</p> <p>5 tens and 6 ones = 4 tens and 16 ones Subtract ones 16-9=7 ones Subtract tens 4-2= 2 tens</p> <p>OR</p> <p>Counting on from 29:</p> <p style="text-align: center;">1 + 10 + 10 + 6 = 27</p>  | T | O | 4 | 16 | 5 | 6 | 2 | 9 | 2 | 7 | |
| T | O | | | | | | | | | | | | |
| 4 | 16 | | | | | | | | | | | | |
| 5 | 6 | | | | | | | | | | | | |
| 2 | 9 | | | | | | | | | | | | |
| 2 | 7 | | | | | | | | | | | | |
| 6. | <p>Complete the number sequence.</p> <p>78, 68, 58, _____, _____</p> <p>Answer:</p> <p>78, 68, 58, 48, 38</p> | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>T</td><td>O</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>6</td><td>8</td></tr> <tr><td>5</td><td>8</td></tr> </table> <p>Subtract 10</p> <p>Subtract 10</p> <p>Pattern</p> <p>The 'ones' digit in all three numbers are all 8.</p> <p>In each number, the tens digit is one less than the number from before. Each number is 10 less than the number before</p> <p>58-10 = 48 48-10 = 38</p> <p>The next two numbers should be 48 and 38</p> | T | O | 7 | 8 | 6 | 8 | 5 | 8 | | | |
| T | O | | | | | | | | | | | | |
| 7 | 8 | | | | | | | | | | | | |
| 6 | 8 | | | | | | | | | | | | |
| 5 | 8 | | | | | | | | | | | | |


| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|--|--|--------------------------|
| 7. | <p>These are Bob's toy trucks.</p>  <p>Bob shares them equally among his five friends. How many toy trucks will each friend get?</p> <p>Answer: 3 trucks</p> | <p>There are 5 friends and each must get the same number of trucks. Draw 5 sets and share one truck at a time until no trucks are left.</p>  <p>Each friend will receive 3 trucks.</p> | |
| 8. | <p>Jenna bought 6 packs of crayons.</p> <p>Each pack had 4 crayons.</p> <p>How many crayons did she buy altogether?</p> <p>Answer: 24 crayons</p> | <p>Each pack has 4 crayons. There are 6 packs. The number of crayons bought = $4 + 4 + 4 + 4 + 4 + 4$ = 4×6 = 24</p> | |


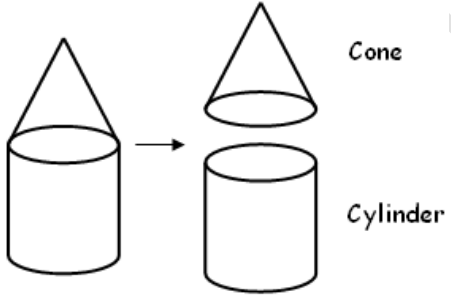
| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|---|---|--------------------------|
| 9. | <p>Shade the coins that make up one dollar.</p>  <p>Answer:</p>  <p>OR</p>  | <p>To make up one dollar we can use</p> <p>3 of 25¢ = 25 + 25 + 25 = 75 c</p> <p>2 of 10¢ = 10 + 10 = 20 c</p> <p>1 of 5¢ = 5 c</p> <p>= 100 c</p> <p>OR</p> <p>3 of 25¢ = 25 + 25 + 25 = 75 c</p> <p>1 of 10¢ = 10 c</p> <p>3 of 5¢ = 5 + 5 + 5 = 15 c</p> <p>= 100 c</p> | |

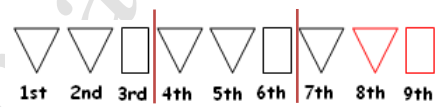

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|--|--|--------------------------|
| 10. | <p>Tick (✓) the box next to the correct answer.</p> <p>The height of a classroom is</p> <p><input checked="" type="checkbox"/> more than a metre <input type="checkbox"/> less than a metre <input type="checkbox"/> equal to a metre</p> | <p>The height of a child is more than than a metre. The height of a classroom is greater than the height of a child. The height of a classroom is therefore more than one metre.</p> | |
| 11. | <p>The digital clock shows the time that Tom left school.</p> <div style="text-align: center;">  </div> <p>Draw the hands on the clock to show this time.</p> <div style="text-align: center;">  </div> <p>Answer:</p> <div style="text-align: center;">  </div> | <p>The digital clock shows 3:00 which is 3 o'clock. The minute hand should point to 12 and the hour hand should point to the hour which is 3.</p> | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|---|---|--------------------------|
| 12. | <p>Container A is filled and container B is empty.</p> <div style="text-align: center;">  </div> <p>About how many of container A is needed to fill container B?</p> <p>Answer: 2</p> | <p>The width container A appears to be the same as the width of container B.</p> <p>Container B is about twice the height of Container A.</p> <p>Therefore, it would take about 2 of Container A to fill Container B.</p> | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|--|---|--------------------------|
| 13. | <p>Two shapes, S and T are drawn on a grid.</p>  <p style="text-align: center;">  1 square unit </p> <p>a. What is the area of shape T? Answer: 7 square units</p> <p>b. Which shape is smaller in area? Answer: T</p> | <p>a. By counting, shape T is made up of 7 squares. Since each square has an area of 1 square unit, then the area of T = 7 square units</p> <p>b. By counting shape S is made up of 8 squares. Therefore, the area of S 8 square units</p> <p>7 is less than 8. Therefore, T has a smaller area than S.</p> | |

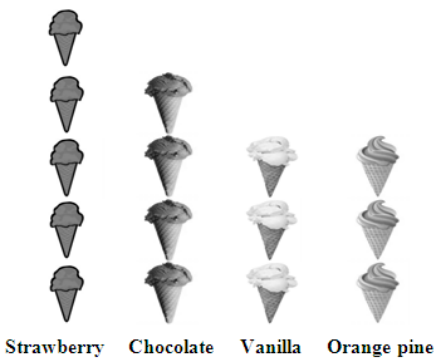
| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|---|---|--------------------------|
| 14. | <p>Andy bought:</p> <p>5 plums at \$1.00 each</p> <p>1 gift box for \$8.00</p> <p>He paid with \$20.00. How much change did he get?</p> <p>Answer: \$7</p> | <p>Cost of 5 plums at \$1 each $= \\$1 + \\$1 + \\$1 + \\$1 + \\$1$ $= \\$1 \times 5$ $= \\$5$</p> <p>Cost of the gift box = \$8 Then the total cost of 5 plums and 1 gift box = $\\$8 + \\5 $= \\$13$</p> <p>Andy paid with \$20. Andy's change = $\\$20 - \\13 $= \\$7$</p> | |
| 15. | <p>Name a shape with four equal sides.</p> <p>Answer: Square</p> | <p>A shape with four equal sides is a square.</p> <div style="text-align: center;">  </div> | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|---|---|--------------------------|
| 16. | <p>Two solids make up the shape.</p>  <p>Name the two solids.</p> <p>Answer: (i) Cylinder (ii) Cone</p> | <p>The given shape is a cylinder with a cone on top.</p>  | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|--|--|--------------------------|
| 17. | <p>a. Draw the next two shapes in the sequence.</p> <p style="text-align: center;">▽▽□▽▽□▽</p> <p>Answer:</p> <p style="text-align: center;">▽▽□▽▽□▽▽□</p> <p>b. Circle the name of the 12th shape in the pattern.</p> <p style="text-align: center;">Triangle Rectangle</p> | <p>a. The repeated unit in the sequence of shapes is made up of two triangles followed by a rectangle.</p> <p style="text-align: center;">▽▽□</p> <p>To continue the pattern, the next two shapes in the unit are</p> <p style="text-align: center;">▽□</p> <p style="text-align: center;">  1st 2nd 3rd 4th 5th 6th 7th 8th 9th </p> <p>b. Every 3rd shape is a rectangle. Rectangles will be the 3rd, 6th, 9th, 12th, 15th, and so on</p> <p style="text-align: center;">  10th 11th 12th </p> <p>The 12th shape is a rectangle</p> | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|-----------------|--------------------------|-----------------|-----|--|---|------|--|---|-------|--|---|--------|-------|-----------------|-----|--|---|------|--|---|-------|--|---|---|--------|-------|-----------------|-----|--|---|------|--|---|-------|--|---|--|
| 18. | <p>The table below shows the favourite colour of 20 children.</p> <table border="1" data-bbox="321 600 760 835"> <thead> <tr> <th>Colour</th> <th>Tally</th> <th>No. of children</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td> </td> <td>8</td> </tr> <tr> <td>Blue</td> <td> </td> <td>7</td> </tr> <tr> <td>Green</td> <td> </td> <td>5</td> </tr> </tbody> </table> <p>a. Complete the table.</p> <p>Answer:</p> <table border="1" data-bbox="321 1024 760 1260"> <thead> <tr> <th>Colour</th> <th>Tally</th> <th>No. of children</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td> </td> <td>8</td> </tr> <tr> <td>Blue</td> <td> </td> <td>7</td> </tr> <tr> <td>Green</td> <td> </td> <td>5</td> </tr> </tbody> </table> <p>b. What is the favourite colour of most children?</p> <p>Answer: Red</p> | Colour | Tally | No. of children | Red | | 8 | Blue | | 7 | Green | | 5 | Colour | Tally | No. of children | Red | | 8 | Blue | | 7 | Green | | 5 | <p>a. 5 children chose green as their favourite colour.</p> <table border="1" data-bbox="899 600 1289 806"> <thead> <tr> <th>Colour</th> <th>Tally</th> <th>No. of children</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td> </td> <td>8</td> </tr> <tr> <td>Blue</td> <td> </td> <td>7</td> </tr> <tr> <td>Green</td> <td> </td> <td>5</td> </tr> </tbody> </table> <p>b. The largest number from 8, 7 and 5 is 8. Therefore, the favourite colour of most children is red.</p> | Colour | Tally | No. of children | Red | | 8 | Blue | | 7 | Green | | 5 | |
| Colour | Tally | No. of children | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Red | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blue | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Green | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Colour | Tally | No. of children | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Red | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blue | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Green | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Colour | Tally | No. of children | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Red | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blue | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Green | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> | | | | | | | | | | | | | | | | | | |
|-------------|--|----------------|--------------------------|--------|----|--------|----|-----|----|--|---|---|---|---|---|---|---|---|---|---|--|
| 19. | <p>The table shows the make of cars parked in a car park.</p> <table border="1" data-bbox="315 556 760 781"> <thead> <tr> <th>Type of car</th> <th>Number of cars</th> </tr> </thead> <tbody> <tr> <td>Toyota</td> <td>17</td> </tr> <tr> <td>Lancer</td> <td>12</td> </tr> <tr> <td>Kia</td> <td>11</td> </tr> </tbody> </table> <p>a. What is the most popular car?</p> <p>Answer: Toyota</p> <p>b. What is the total number of cars in the car park?</p> <p>Answer: 40 cars</p> | Type of car | Number of cars | Toyota | 17 | Lancer | 12 | Kia | 11 | <p>a. The largest number from 17, 12 and 11 is 17. Therefore, the most popular car is Toyota.</p> <p>b. The total number of cars parked in the car park $= 17 + 12 + 11$ $= 40$</p> <table border="1" data-bbox="854 915 972 1182"> <thead> <tr> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>7</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td>4</td> <td>0</td> </tr> </tbody> </table> <p>Add the ones $7+2+1=10$ ones 10 ones =1 ten and 1 one Add the tens $1+1+1=4$ tens</p> | T | O | 1 | 7 | 1 | 2 | 1 | 1 | 4 | 0 | |
| Type of car | Number of cars | | | | | | | | | | | | | | | | | | | | |
| Toyota | 17 | | | | | | | | | | | | | | | | | | | | |
| Lancer | 12 | | | | | | | | | | | | | | | | | | | | |
| Kia | 11 | | | | | | | | | | | | | | | | | | | | |
| T | O | | | | | | | | | | | | | | | | | | | | |
| 1 | 7 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| 4 | 0 | | | | | | | | | | | | | | | | | | | | |

| NO. | TEST ITEMS | WORKING COLUMN | <i>Do Not Write Here</i> |
|-----|--|---|--------------------------|
| 20. | <p>Favourite ice cream flavours of children</p>  <p>Strawberry Chocolate Vanilla Orange pine</p> <p>One cone = 1 child</p> <p>a. How many children chose chocolate?</p> <p>Answer: 4</p> <p>b. Five children chose strawberry.</p> <p>c. The total number of children who chose vanilla and orange pine is 6.</p> | <p>a. There are 4 cones in the column for chocolate. 1 cone = 1 child Therefore, the number of children who chose chocolate = 4.</p> <p>b. The column for strawberry has 5 cones. Therefore, 5 children chose strawberry.</p> <p>c. The number of children who chose orange pine = 3 The number of children who chose vanilla = 3 Therefore, the total number of children who chose vanilla and orange pine = 3 + 3 = 6</p> | |

END OF TEST