

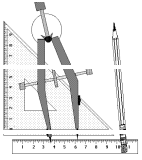
5<sup>ème</sup>

Rallye mathématique de la Sarthe  
2011/2012

2<sup>ème</sup> épreuve de qualification : Problèmes

Feuille Réponse - Corrigé

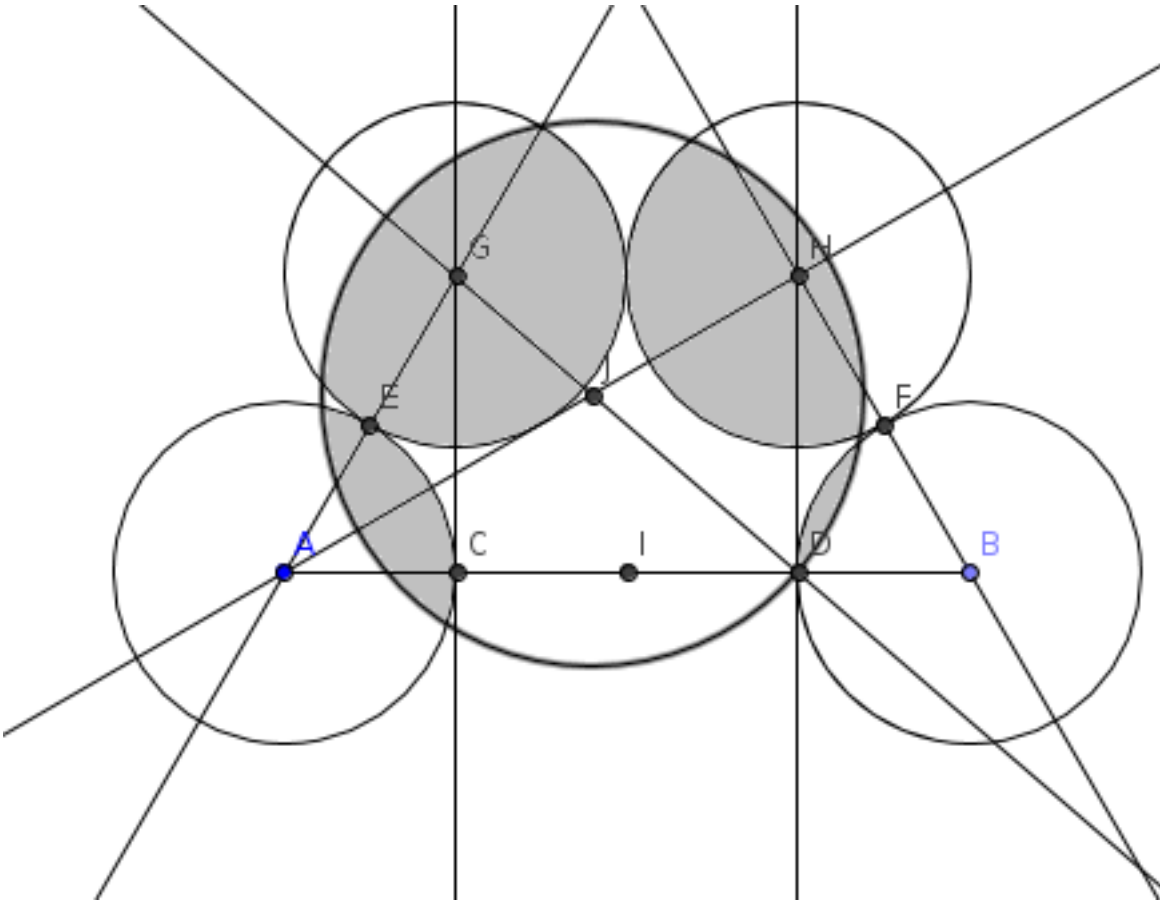
<p style="text-align: center;"><b>I</b></p> <p style="text-align: center;">Le dernier numéro impair de ma rue est :</p> <p style="text-align: center;"><b>75</b></p>	<p style="text-align: center;"><b>II</b></p> <p style="text-align: center;">il doit extraire <b>4</b> chaussettes au minimum pour être certain d'avoir deux chaussettes de couleur identique</p>																																																																																					
<p style="text-align: center;"><b>III</b></p> <p style="text-align: center;">L'addition, sachant que Y vaut 5 est :</p> $  \begin{array}{r}  4\ 7\ 6\ 6\ 5\ 3 \\  +\ 4\ 3\ 2\ 1\ 1\ 0 \\  \hline  9\ 0\ 8\ 7\ 6\ 3  \end{array}  $	<p style="text-align: center;"><b>IV</b></p> <p style="text-align: center;">Il lui reste <b>32</b> segments à tracer .</p>																																																																																					
<p style="text-align: center;"><b>V.</b></p> <p>Voici deux exemples d'ordre 15 et deux d'ordre 16 :</p> <table style="width: 100%; text-align: center;"> <tr> <td> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>3</td><td>5</td><td>7</td></tr> <tr><td>4</td><td style="background-color: black;"></td><td>2</td></tr> <tr><td>8</td><td>1</td><td>6</td></tr> </table> <span style="font-size: small;">15</span> </td> <td> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>3</td><td>8</td><td>4</td></tr> <tr><td>7</td><td style="background-color: black;"></td><td>2</td></tr> <tr><td>5</td><td>1</td><td>9</td></tr> </table> <span style="font-size: small;">15</span> </td> <td> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>1</td><td>8</td><td>7</td></tr> <tr><td>6</td><td style="background-color: black;"></td><td>4</td></tr> <tr><td>9</td><td>2</td><td>5</td></tr> </table> <span style="font-size: small;">16</span> </td> <td> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>1</td><td>7</td><td>8</td></tr> <tr><td>6</td><td style="background-color: black;"></td><td>3</td></tr> <tr><td>9</td><td>2</td><td>5</td></tr> </table> <span style="font-size: small;">16</span> </td> </tr> <tr> <td><span style="font-size: x-small;">15</span></td> <td><span style="font-size: x-small;">15</span></td> <td><span style="font-size: x-small;">16</span></td> <td><span style="font-size: x-small;">16</span></td> </tr> </table>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>3</td><td>5</td><td>7</td></tr> <tr><td>4</td><td style="background-color: black;"></td><td>2</td></tr> <tr><td>8</td><td>1</td><td>6</td></tr> </table> <span style="font-size: small;">15</span>	3	5	7	4		2	8	1	6	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>3</td><td>8</td><td>4</td></tr> <tr><td>7</td><td style="background-color: black;"></td><td>2</td></tr> <tr><td>5</td><td>1</td><td>9</td></tr> </table> <span style="font-size: small;">15</span>	3	8	4	7		2	5	1	9	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>1</td><td>8</td><td>7</td></tr> <tr><td>6</td><td style="background-color: black;"></td><td>4</td></tr> <tr><td>9</td><td>2</td><td>5</td></tr> </table> <span style="font-size: small;">16</span>	1	8	7	6		4	9	2	5	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>1</td><td>7</td><td>8</td></tr> <tr><td>6</td><td style="background-color: black;"></td><td>3</td></tr> <tr><td>9</td><td>2</td><td>5</td></tr> </table> <span style="font-size: small;">16</span>	1	7	8	6		3	9	2	5	<span style="font-size: x-small;">15</span>	<span style="font-size: x-small;">15</span>	<span style="font-size: x-small;">16</span>	<span style="font-size: x-small;">16</span>	<p style="text-align: center;"><b>VI</b></p> <p style="text-align: center;"> <span style="font-size: 2em;">□</span> = <b>11</b>      <span style="font-size: 2em;">○</span> = <b>24</b>  <span style="font-size: 2em;">◆</span> = <b>15</b>      * = <b>6</b> </p>																																									
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5<sup>ème</sup>

**Feuille Réponse - Corrigé**

**Activité 1 : L'éclipse de Lune.**



**Activité 2 : La date de Pâques**

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>
2020	0	4	6	138	18	129	3	21

$17 > 9$  donc le jour de Pâques est le  $(21 - 9)$  avril soit le **12 avril**.