

BASE

cubes

carrés

barrettes

unités





Les ateliers de Cathy



<p>1876 base 9 =</p> <p style="text-align: right;">base 10</p>	$ \begin{aligned} &1(9^3) + 8(9^2) + 7(9^1) + 6(9^0) = \\ &1 \times 729 + 8 \times 81 + 7 \times 9 + 6 \times 1 = \\ &729 + 648 + 63 + 6 = \\ &\quad\quad\quad 1446 \end{aligned} $
<p>1333 base 4 =</p> <p style="text-align: right;">base 10</p>	$ \begin{aligned} &1(4^3) + 3(4^2) + 3(4^1) + 3(4^0) = \\ &1 \times 64 + 3 \times 16 + 3 \times 4 + 3 \times 1 = \\ &64 + 48 + 12 + 3 = \\ &\quad\quad\quad 127 \end{aligned} $
<p>1654 base 7 =</p> <p style="text-align: right;">base 10</p>	$ \begin{aligned} &1(7^3) + 6(7^2) + 5(7^1) + 4(7^0) = \\ &1 \times 343 + 6 \times 49 + 5 \times 7 + 4 \times 1 = \\ &343 + 294 + 35 + 4 = \\ &\quad\quad\quad 676 \end{aligned} $
<p>1752 base 8 =</p> <p style="text-align: right;">base 10</p>	$ \begin{aligned} &1(8^3) + 7(8^2) + 5(8^1) + 2(8^0) = \\ &1 \times 512 + 7 \times 64 + 5 \times 8 + 2 \times 1 = \\ &512 + 448 + 40 + 2 = \\ &\quad\quad\quad 1002 \end{aligned} $



<p>1531 base 6 =</p> <p>base 10</p>	$ \begin{array}{r} 1(6^3) + 5(6^2) + 3(6^1) + 1(6^0) = \\ 1 \times 216 + 5 \times 36 + 3 \times 6 + 1 \times 1 = \\ 216 + 180 + 18 + 1 = \\ \mathbf{415} \end{array} $
<p>1434 base 5 =</p> <p>base 10</p>	$ \begin{array}{r} 1(5^3) + 4(5^2) + 3(5^1) + 4(5^0) = \\ 1 \times 125 + 4 \times 25 + 3 \times 5 + 4 \times 1 = \\ 125 + 100 + 15 + 4 = \\ \mathbf{244} \end{array} $
<p>1222 base 3 =</p> <p>base 10</p>	$ \begin{array}{r} 1(3^3) + 2(3^2) + 2(3^1) + 2(3^0) = \\ 1 \times 27 + 2 \times 9 + 2 \times 3 + 2 \times 1 = \\ 27 + 18 + 6 + 2 = \\ \mathbf{53} \end{array} $

