

calc_decimal_example

Student Group

| First Name | Surname | Matrikel Nr. |
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| | | |
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\color{black}{7} \\ \color{black}{\text{index}:} & \color{black}{i} & \color{black}{3} &
\color{black}{2} & \color{black}{1} & \color{black}{0} & \color{black}{-1} & \color{black}{-2} \\
\color{blue }{\text{place factor}:} & \color{blue }{B^i} & \color{blue }{10^3} & \color{blue
}{10^2} & \color{blue }{10^1} & \color{blue }{10^0} & \color{blue }{10^{-1}} & \color{blue
}{10^{-2}} \\
\color{white}{} & \color{white}{} & \color{white}{1000} & \color{white}{100} &
\color{white}{10} & \color{white}{1} & \color{white}{0.1} & \color{white}{0.01} \\
\color{white}{\text{digits}:} & \color{white}{z_i} & \color{white}{2} & \color{white}{6} &
\color{white}{5} & \color{white}{8} & \color{white}{4} & \color{white}{7} \\
\color{white}{\text{place value}:} & \color{white}{z_i \cdot B^i} & \color{white}{2000} &
\color{white}{600} & \color{white}{50} & \color{white}{8} & \color{white}{0.4} &
\color{white}{0.07} \\
\color{white}{\text{result}:} & \color{white}{\sum_i z_i \cdot B^i} & & & & & &
\color{white}{2658.47} \\
\end{smallmatrix} \end{align*}

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3. calculate the place factor

(= ..., thousands, hundreds, tens, ones, tenths, ...)

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\begin{align*} \begin{smallmatrix} \color{black}{\text{numeral}:} & \color{black}{} &
\color{black}{2} & \color{black}{6} & \color{black}{5} & \color{black}{8.} & \color{black}{4} &
\color{black}{7} \\
\color{black}{\text{index}:} & \color{black}{i} & \color{black}{3} &
\color{black}{2} & \color{black}{1} & \color{black}{0} & \color{black}{-1} & \color{black}{-2} \\
\color{blue }{\text{place factor}:} & \color{blue }{B^i} & \color{blue }{10^3} & \color{blue
}{10^2} & \color{blue }{10^1} & \color{blue }{10^0} & \color{blue }{10^{-1}} & \color{blue
}{10^{-2}} \\
\color{blue }{} & \color{blue }{} & \color{blue }{1000} & \color{blue }{100} &
\color{blue }{10} & \color{blue }{1} & \color{blue }{0.1} & \color{blue }{0.01} \\
\color{white}{\text{digits}:} & \color{white}{z_i} & \color{white}{2} & \color{white}{6} &
\color{white}{5} & \color{white}{8} & \color{white}{4} & \color{white}{7} \\
\color{white}{\text{place value}:} & \color{white}{z_i \cdot B^i} & \color{white}{2000} &
\color{white}{600} & \color{white}{50} & \color{white}{8} & \color{white}{0.4} &
\color{white}{0.07} \\
\color{white}{\text{result}:} & \color{white}{\sum_i z_i \cdot B^i} & & & & & &
\color{white}{2658.47} \\
\end{smallmatrix} \end{align*}

```

4. write down each digit of the numeral

\square

```

\begin{align*} \begin{smallmatrix} \color{black}{\text{numeral}:} & \color{black}{} &
\color{black}{2} & \color{black}{6} & \color{black}{5} & \color{black}{8.} & \color{black}{4} &
\color{black}{7} \\
\color{black}{\text{index}:} & \color{black}{i} & \color{black}{3} &
\color{black}{2} & \color{black}{1} & \color{black}{0} & \color{black}{-1} & \color{black}{-2} \\
\color{black}{\text{place factor}:} & \color{black}{B^i} & \color{black}{10^3} & &
\color{black}{10^2} & \color{black}{10^1} & \color{black}{10^0} & \color{black}{10^{-1}} &
\color{black}{10^{-2}} \\
\color{black}{} & \color{black}{} & \color{black}{1000} & &
\color{black}{100} & \color{black}{10} & \color{black}{1} & \color{black}{0.1} &
\color{black}{0.01} \\
\color{blue }{\text{digits}:} & \color{blue }{z_i} & \color{blue }{2} & &
\color{blue }{6} & \color{blue }{5} & \color{blue }{8} & \color{blue }{4} & \color{blue }{7} \\
\color{white}{\text{place value}:} & \color{white}{z_i \cdot B^i} & \color{white}{2000} & &
\color{white}{600} & \color{white}{50} & \color{white}{8} & \color{white}{0.4} &
\color{white}{0.07} \\
\color{white}{\text{result}:} & \color{white}{\sum_i z_i \cdot B^i} & & & & & & &
\color{white}{2658.47} \\
\end{smallmatrix} \end{align*}

```

