Logics and Mathematics – 7$^{\text{th}}$ lecture
Exercise sheet

Preining Norbert

Don't use a calculator!

Problem 1 Convert the following numbers from base 10 to base 2 and base 16:
$(50)_{10}$, $(2532)_{10}$

Problem 2 Convert the following numbers to base 10:
$(12012)_3$, $(1D0F)_{16}$

Problem 3 Convert the following numbers to base 16:
$(10110011)_2$, $(11001001)_2$

Problem 4 Carry out the following binary addition:

$$
\begin{array}{ll}
\;(101100110)_2 \\
+\quad (1110111)_2 \\
\hline
=
\end{array}
\qquad
\begin{array}{ll}
\;(13F)_{16} \\
+\quad (AB)_{16} \\
\hline
=
\end{array}
\qquad
\begin{array}{ll}
\;(7246)_8 \\
+\quad (1302)_8 \\
\hline
=
\end{array}
$$