

1. Minima and Maxima

a.	b.
c.	d.

Scratch Work:

2. Two's complement conversions

From base ten to 8-bit two's complement	From 16-bit two-complement to base ten.
$107_{10} =$	$0x5F8C =$
$-107_{10} =$	$0xCAFE =$

Scratch Work:

3. Unsigned arithmetic.

$$\begin{array}{r} 00101101 \\ + 01101111 \\ \hline \end{array}$$

Sum₂ =

Sum₁₀ =

Overflow?

$$\begin{array}{r} 11111111 \\ + 11111111 \\ \hline \end{array}$$

$$\begin{array}{r} 00000000 \\ - 11111111 \\ \hline \end{array}$$

4. Two's complement arithmetic.

$$\begin{array}{r} 00101101 \\ + 01101111 \\ \hline \end{array}$$

Sum₂ =

Sum₁₀ =

Overflow?

$$\begin{array}{r} 11111111 \\ + 11111111 \\ \hline \end{array}$$

$$\begin{array}{r} 00000000 \\ - 11111111 \\ \hline \end{array}$$