Ip Checksum Example

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1 Example

$$
\begin{array}{rrrcr}
 & 0001 & 0001 & & (17) \\
+ & 1111 & 0111 & & (-8) \\
\hline
1 & 0000 & 1000 & & \\
 & \hookrightarrow & +1 & & \\
\hline
 & 0000 & 1001 & = & (9)
\end{array}
$$

Hence the checksum is:

$$
\begin{array}{rr}
1111 & 0110
\end{array}
$$

If we sum up the original two numbers with the checksum we get:

$$
\begin{array}{rrr}
 & 0001 & 0001 \\
 & 1111 & 0111 \\
+ & 1111 & 0110 \\
\hline
 & 11111 & 1110
\end{array}
$$

Of courxse with the carry over we have: 1111 1111 which is -0.