## Binary Addition

Layout/working out:
You would write it like a
normal addition sum. So:
10110110
$\underline{00100110}$

Then, we have to follow these rules:
$0+0=0$
$1+0=1$
$0+1=1$
$1+1=0$ (carry the 1 )
$1+1+($ carried $) 1=1$ (carry 1$)$
Therefore:
10110110+
$\underline{00100110}$
$\underline{11011100}$
111


ARCHIE
SLADDEN
$11011100=220$
This can be used to solve any binary addition.

Overflow error
An overflow occurs when there is a $1+1$ or $1+1+($ carried $) 1$ at the end of the addition. An overflow error occurs because there is not a big enough bit storage space.

