# Binary & Hexadecimal Math

## Binary Rules

- 0+0=0
- 1+0=1
- 0+1=1
- 1+1=10
- 1+1+1=11
- 10-1=1

## Hexadecimal Rules

- If 16 of greater: subtract from 16 to get column answer and carry 1
- Borrow 16 in subtraction

## *Binary Addition & Subtraction Problems*

```
   101          111          1010          11101
+   11        + 111        + 1010        +  1010
```

```
  11111          110           101           1001
+ 11111        -  10        -   11        -    11
```

```
   1101         10001
-    11        -   100
```

## *Hexadecimal Addition & Subtraction Problems*

```
   2E9F          9DAD          9EF5          33F2
+  947A        +  6E5E       +  97BA       +  3A11
```

```
   A737          832B          B881          39FB
+  695F        +  AF1D       +  FFBD       +  33FC
```

```
   C22A         15646         15805         112C7
+  3D3D        -  C89A       -  C44C       -   A76E
```

```
   14D88         14C21         140DD         E3B7
-   953B        -  5FD3       -  690D       -  A538
```

```
   10508         12D92          C326         FF45
-   60DD        -  7E53       -  56C2       -  86CB
```