

16:AS  
overflow = a[7] & b[7] & (a[7] | b[7]);

```
graph TD; A["16:AS  
overflow = a[7] & b[7] & (a[7] | b[7]);"] --> B["15:AS  
s = a[7] & b[7] ^ (a[7] & overflow) | b[7] & overflow & a[7];"]
```

15:AS  
s = a[7] & b[7] ^ (a[7] & overflow) | b[7] & overflow & a[7];