

16:AS
 $s = a + b;$

```
graph TD; A([16:AS  
s = a + b;]) --> B([18:AS  
overflow = a[7] & b[7] & ~s[7] | ~(a[7] | b[7]) & s[7];]);
```

18:AS
 $\text{overflow} = a[7] \& b[7] \& \sim s[7] \mid \sim(a[7] \mid b[7]) \& s[7];$