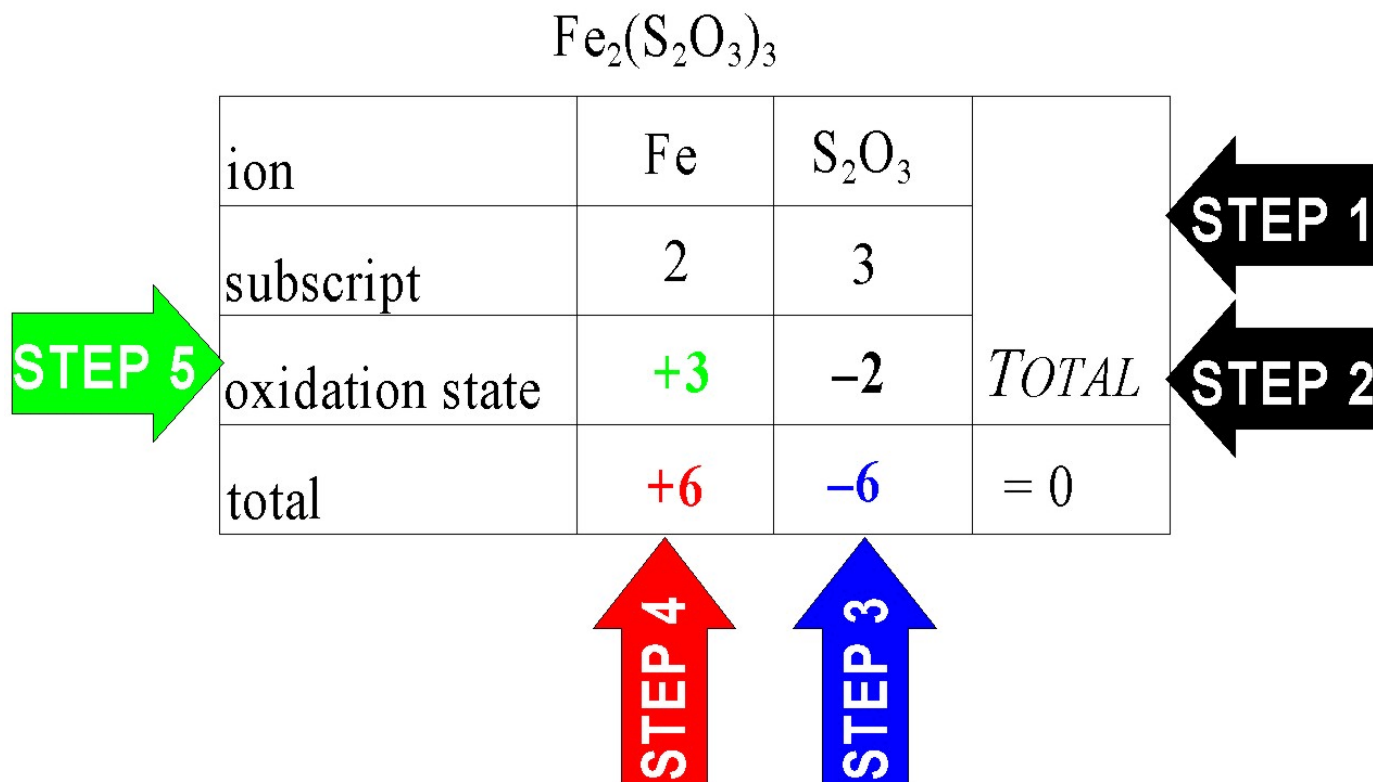


## Determining the Charge on a Metal Ion

$\text{Fe}_2(\text{S}_2\text{O}_3)_3$

ion	Fe	$\text{S}_2\text{O}_3$	
subscript	2	3	
oxidation state	+3	-2	TOTAL
total	+6	-6	= 0



### Prepare a table as above.

- Step 1:** List the subscripts for the metal and the nonmetal ions.
- Step 2:** Look up the oxidation state of the nonmetal ion on the *Periodic Table*.
- Step 3:** Multiply the oxidation state of the nonmetal by its subscript to get the total charge.
- Step 4:** Determine the total charge of the metal ions by calculating the number which, when added to the total charge of the nonmetal ion, gives the compound a total charge of zero.
- Step 5:** Divide the total charge of the metal ions by the subscript of the metal to get the oxidation state.