

$$T = 2(4) + 2(1) = 8 + 2 = 10e^{-}, \text{ no charge.}$$

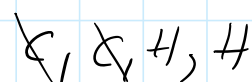
↓
C

↓
H

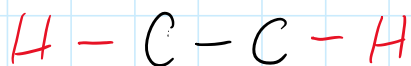
H can not go in the middle



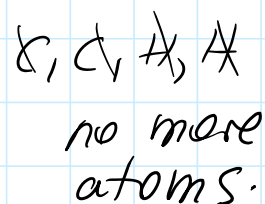
$$T = 10 - 2 = 8e^{-}$$



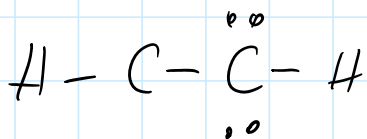
2H act symmetrically here



$$T = 8 - 2(2) = 8 - 4 = 4e^{-}$$

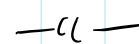


place the $4e^{-}$ evenly on the 2 carbons, or on just one of them. Doesn't matter, still not enough...



$$T = 4 - 4e^{-} = 0e^{-}$$

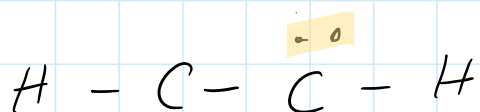
none left



C₂ has an 8-et but C₂ doesn't. It must

share e^- s w/ the other C to complete its 8et.

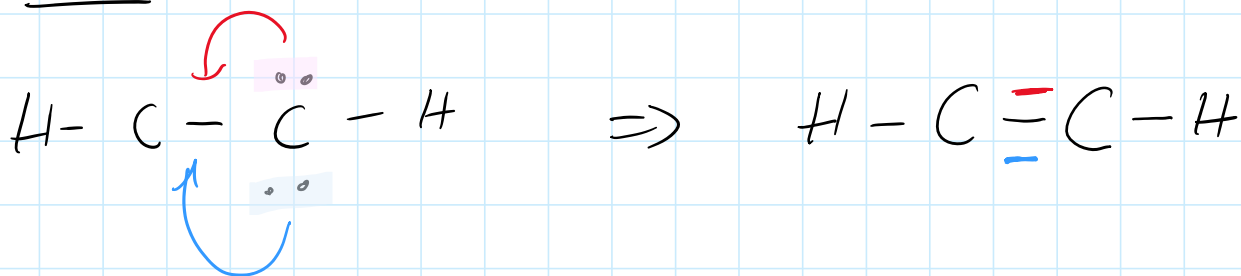
C_L has $4e^-$ s so it needs 4 more.



both pairs of C_R are needed by C_L



Overall:



The 2 central atoms both hv an 8-et now.

$$FC-S: \quad FC(C_L) = FC(C_R) = 4 - 4 = 0 \quad \checkmark$$

The final Lewis structure is

