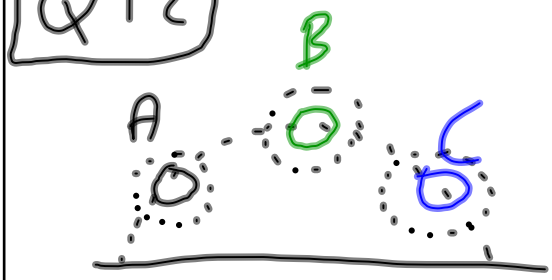
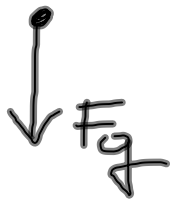
Q1c)



FBD A = B = C



Dec 8-9:42 AM

CAR + BUG.

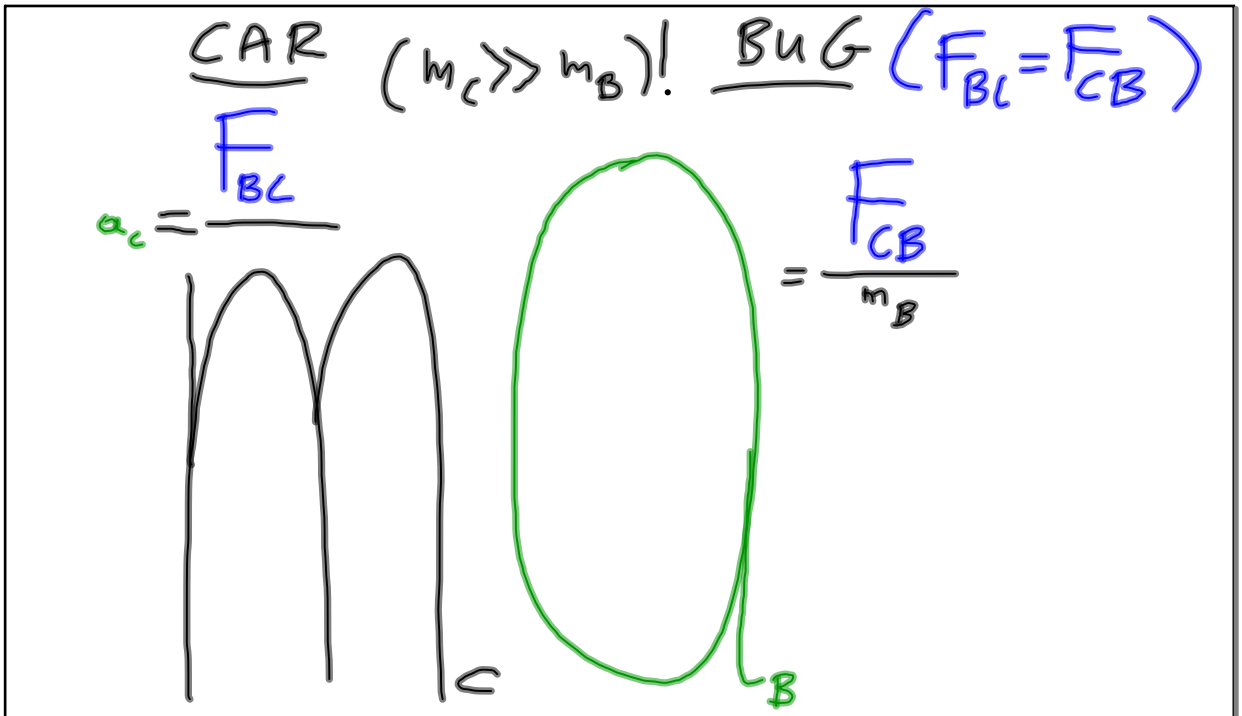
BUG

$F_{CB} = F_{BC}$

N2L: $a = \frac{F_{NET}}{m}$ $\left(\Sigma F = m \cdot a\right)$

Let's use N2L to calculate the acceleration for both objects during the crash.

Dec 8-9:47 AM



The bug gets ripped apart due to enormous acceleration.

Dec 8-9:57 AM