



Weights and Balances Questions

Answer the following questions based on what you learned from the video:

1. How do I determine a vehicle's Gross Weight (GW)?
2. If a vehicle that has a Rear Axle Weight (RAW) of 4200 lbs and a Front Axle Weight (FAW) of 3750 lbs, what is the Gross Weight (GW) of the vehicle?
3. How do I find the wheelbase for a vehicle?
4. If a vehicle has a RAW of 3940 lbs and a wheelbase of 156 inches, what are its moments?
5. If a vehicle that has a Rear Axle Weight (RAW) of 4200 lbs and a Front Axle Weight (FAW) of 3750 lbs and wheelbase of 162 inches, what is its Center of Gravity (CG) from the front axle?
6. If I park a vehicle at center balance (CB) station number 740 on the aircraft and its Gross Weight (GW) is 8900 lbs, how many moments does that give me?
7. We have 3 vehicles loaded on the aircraft. Vehicle one has a RAW of 3400 lbs and a FAW weight of 4300 lbs, Vehicle 2 has a RAW of 2750 lbs and a FAW of 3900 lbs and Vehicle 3 has a RAW of 5300 lbs and a FAW of 7470 lbs. What is the total weight that we have loaded on the aircraft?
8. Calculate the total moments based on the following load information:
Vehicle 1 weighs 7,890 lbs and is centered at center balance station 570
Vehicle 2 weighs 16,430 lbs and is centered at center balance 800
Vehicle 3 weighs 9,120 lbs and is centered at center balance 1040



9. How do we calculate the aircraft center of balance?

10. Based on the information in question 8 what would be the Center of Balance (CB) on the aircraft?