Quiz: Transitioning to Complex Aircraft

1. What are the V-speeds for this airplane?

Vs1		Vs0	
Vr		Vfe	
Vy		Vx	
Vno		Vne	
Va		Best glide	
Approach			
Vlo		Vle	

2. How much do the fuel tanks hold? (Useable and unusable)

3. Calculate a weight and balance for today's conditions:

4. How much runway do we need for today's conditions with full tanks of fuel, takeoff and landing?

5. Does this airplane have an automatic gear extension? If so, how is it triggered?

6. How are the gear operated? What powers the gear?

7. How does the emergency gear extension work?

8. Read the Boldmethod article on a constant speed prop. (https://www.boldmethod.com/learn-to-fly/aircraft-systems/how-a-constant-speed-prop-works/) What happens to the prop pitch if you lose oil pressure?

9. What else is about to fail if you lost oil pressure?

10. Read “Manifold Pressure Sucks”: https://www.advancedpilot.com/downloads/prep.pdf

11. You want to reduce your speed. Do you reduce your manifold pressure first or your RPMs?

12. You now want to increase speed. Do you increase the prop RPM or the manifold pressure first?

13. Prop and manifold pressure values (Piper Arrow)
    - **Climb:** 25” manifold, 2500 rpm
    - **Cruise (maneuvering):** 18” manifold, 2400 rpm
    - **Approach:** 15” manifold, max rpm (prop full forward)

Aircraft used for complex endorsement:_____

Instructor:_____

Date:_____