BEFA Initial Quiz: BE76 Duchess, N2008E

1.	Identify the published indicated value (at maximum gross weight) for the following V-speeds:			
	Name	Value	Meaning	
	Vs0	value	Power-off stall in landing configuration	
	Vs1		Power-off stall (gear and flaps up)	
	Vmc		Air minimum control speed with engine inoperative	
	Vsse		Safe single engine speed	
	Vr		Rotation speed	
	Vx		Best all engine angle of climb	
	Vxse		Best single engine angle of climb	
	Vy		Best all engine rate of climb	
	Vyse		Best single engine angle of climb	
	-		Recommended cruise climb speed	
			Maximum glide speed	
	Va		Maneuvering speed	
			Emergency descent	
	Vno		Maximum structural cruising speed	
	Vne		Never exceed speed	
	Vle		Maximum speed landing gear extended	
	Vlo		Maximum speed landing gear operating	
	Vfe		Maximum speed flaps in landing position	
			Landing Approach flaps up	
			Landing Approach flaps down	
			Balked landing climb	
			Maximum demonstrated crosswind component	
2.	To transition to published cruise climb at 500', what are the POH specified values for:			
	101.		MP	
			RPM	
3.	RPM with	the maximum er setting" se	on takeoff at 500' over noise sensitive areas at 2,400 MP in the "recommended values of MP and RPM for ection of the POH MP and RPM performance chart, one	
	would use	· ——	MP	
4.	Per POH r altitude AC		mc demonstrations may not be performed below what	
5.			ns, Power Off/Power On stalls and Slow Flight may only	
			21 C T W W W W W W W W W W W W W W W W W W	

	The minimum altitude for these maneuvers in the FAA Practical Test Standards is 'AGL.				
6.	A BEFA pilot is planning to depart paved, level, dry runway at an airport, 4,000' Pressure Altitude, 30° C, 3,600 pounds, with a 10 knots headwind over a 50' obstacle. The following performance figures may be expected: Ground Roll Total distance over 50-foot obstacle Accelerate-stop distance Two-engine climb rate				
	If an engine were to fail shortly after takeoff, the following performance figures may be expected:				
	Climb (or descent) rate feet per minute at 85 knots Service ceiling				
7.	A BEFA pilot is planning to depart Renton on a standard day with a 10 knots headwind at 3,600 lbs. The following performance figures may be expected: Accelerate-go distance (over 50' obstacle)				
8.	A BEFA pilot is planning to depart Renton on a standard day with a 10 knots headwind. What is the maximum weight at which an accelerate-go procedure is suggested by the POH? Pounds				
9.	You are planning to depart with a 200lbs BEFA CFI and full fuel. Using the actual empty weight and CG locations from N2008E, what are the following weight and balance values: Your weight Empty weight Empty CG Ramp weight Takeoff weight Forward CG limit at takeoff weight Takeoff CG Aft CG limit at takeoff weight				
10.	Considering the zero fuel weight restriction on N2008E, what is the maximum total weight of passengers and baggage? pounds If the aircraft were loaded with this load, what would be the maximum fuel quantity that could be in the tanks at takeoff? Gallons				
11.	A BEFA pilot is planning to cruise at 3,600 pounds at 8,000' pressure altitude on a standard day using Full Throttle and 2,300 RPM. What performance figures may be expected: MP Fuel Flow per engine per hour				
	IAS TAS				

12.	At what pressure altitude should a BEFA pilot fly to obtain maximum true airspeed at recommended cruise power settings? At 2,500 rpm, the true airspeed that would be expected at this altitude would be knots, and the total fuel flow would be gallons per hour.					
13.	Assuming a standard day cruise climb at 100 knots per the POH recommendations and assumptions to the altitude in question 11, the time, fuel consumption, and distance for engine start, taxi, takeoff and the climb would be: Climb minutes Climb gallons Climb nautical miles And if planning a landing with 20 gallons reserve, the range would be: Cruise minutes Cruise nautical miles					
14.	The expected landing distance over a 50' obstacle at a pressure altitude of 4,000', 30° C, with a 10 knots headwind is: feet					
15.	What is the approved maximum duration of a slip? seconds					
16.	The emergency procedure for engine failure during ground roll is:					
	1.					
	2.					
	3.					
	4.					
17.	Under what conditions can the fuel crossfeed system be used:					
18.	What is the procedure for landing gear manual extension:					
	1.					
	2.					
	3.					
	4					
	5.					

19.	The recommended mixture settings, as indicated via the EGT, for level flight at 75% power or less are:				
20.	The procedure relative to the parking brake if the airplane is to be left unattended is to:				
	1, then				
	2.				
21.	The source and fuel consumption rate for the cabin heater is:				
	(Left, Right or Both) tank(s) Gallon per hour				
22.	The total number of fuel drains is:				
23.	The electrical system consists of a volt ampere-hour battery, and two volt ampere alternators.				
24.	What are two purposes for the heater control marked CABIN AIR – PULL OFF?				
25.	For unheated ventilation air while on the ground, the positions of the controls are:				
	Cabin Air				
	Cabin Temp				
	Three-position blower control switch				
26.	Tire pressures are:				
	psi Main tires				
	psi Nose tire				