Homework 6

Study Questions

Commercial AVF 221

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_ Score\_\_\_\_\_

1. What is the relationship of stall speed to load factor?
2. Diagram a turn and label all 6 vector forces
3. Why is a rolling sharp pull up more dangerous than a straight pull up?
4. List the positive and negative G limits for normal, utility and acrobatic categories
5. Why do we need to lower Va as weight is decreased?
6. Why do we need to slow to below Va when turbulence is encountered?
7. What does a wings downward failure usually mean?
8. What does a wings upward failure usually mean?
9. What is a sharp-edged gust?
10. What are the effects of a vertical sharp-edged gust on angle of attack and load factor?
11. How does load distribution affect load factor?
12. On a separate sheet of paper, make a Vg diagram for the F-33A Bonanza. Be sure to label all reference points such as Vs, Va, Vno, Vne, green arc, yellow arc etc. (Reference pg 11-6 for the formula to draw the curves)