Private Pilot Quiz: Aerodynamics

1. When air flows over the airfoil (wing), the air speeds up over the top of the wing creating an area of \_\_\_\_\_\_\_\_ pressure. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Name the four forces of flight:



3. Write where the areas of high and low pressure are created on the wing:



4. Label the wing:

1. Leading edge
2. Trailing edge
3. Chord line
4. Upper camber
5. Angle of attack

5. What are the four left turning tendencies?

6. What is the purpose of the flaps?

1. To create more lift to be able to fly at slower airspeeds
2. To create more drag to slow you down for landing
3. To create more drag at slow speeds
4. A & B

7. Induced drag:

1. Increases as speed increases
2. Decreases as speed decreases
3. Decreases as speed increases

8. Parasite drag:

1. Increases as speed increases
2. Decreases as speed decreases
3. Increases as speed decreases

9. The point where the least amount of induced drag and parasite drag meet is called:

1. Best glide speed
2. L/D max
3. Point of least total drag
4. Total drag
5. A & B

10. Where can you find this speed for your airplane and what is it?