| Name: | Ken | |
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| | 0301 | |

Notes - 5.2 Drag

1. What other force is experienced when moving in a fluid (either a gas or a liquid)?

drag torce

- 2. Like friction, the drag force always Opposes the motion of an object.
- 3. For objects not moving too slowly, the drag force is proportional to the all are of the velocity.

where

c= drag coefficient

p= density of the fluid [ms]

A= area of the object facing the fluid [m2]

- 5. Why is aerodynamic shaping of automobiles important? reduces the drag force and improves the car's gas mileage ow is the drag coefficient C determined?
- 6. How is the drag coefficient C determined?

empirically, usually with a wind tunnel

7. List the drag coefficient of a

Sphere

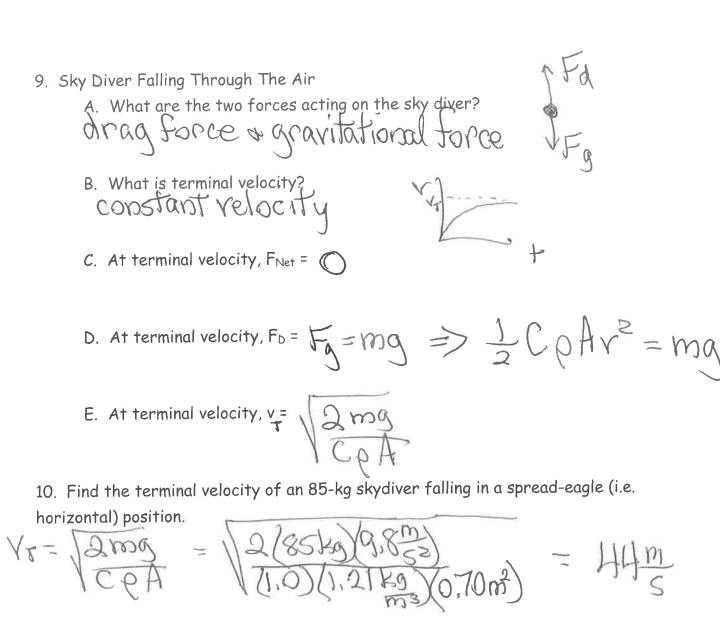
Honda Civic

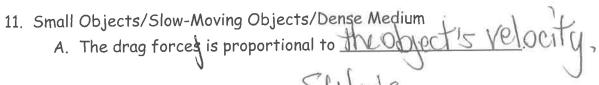
Sky Diver (horizontal)

8. List how drag is minimized in the following sports.

dimples on golf balls

swimming: full body suit





B. This relationship is known as Stoke's law.