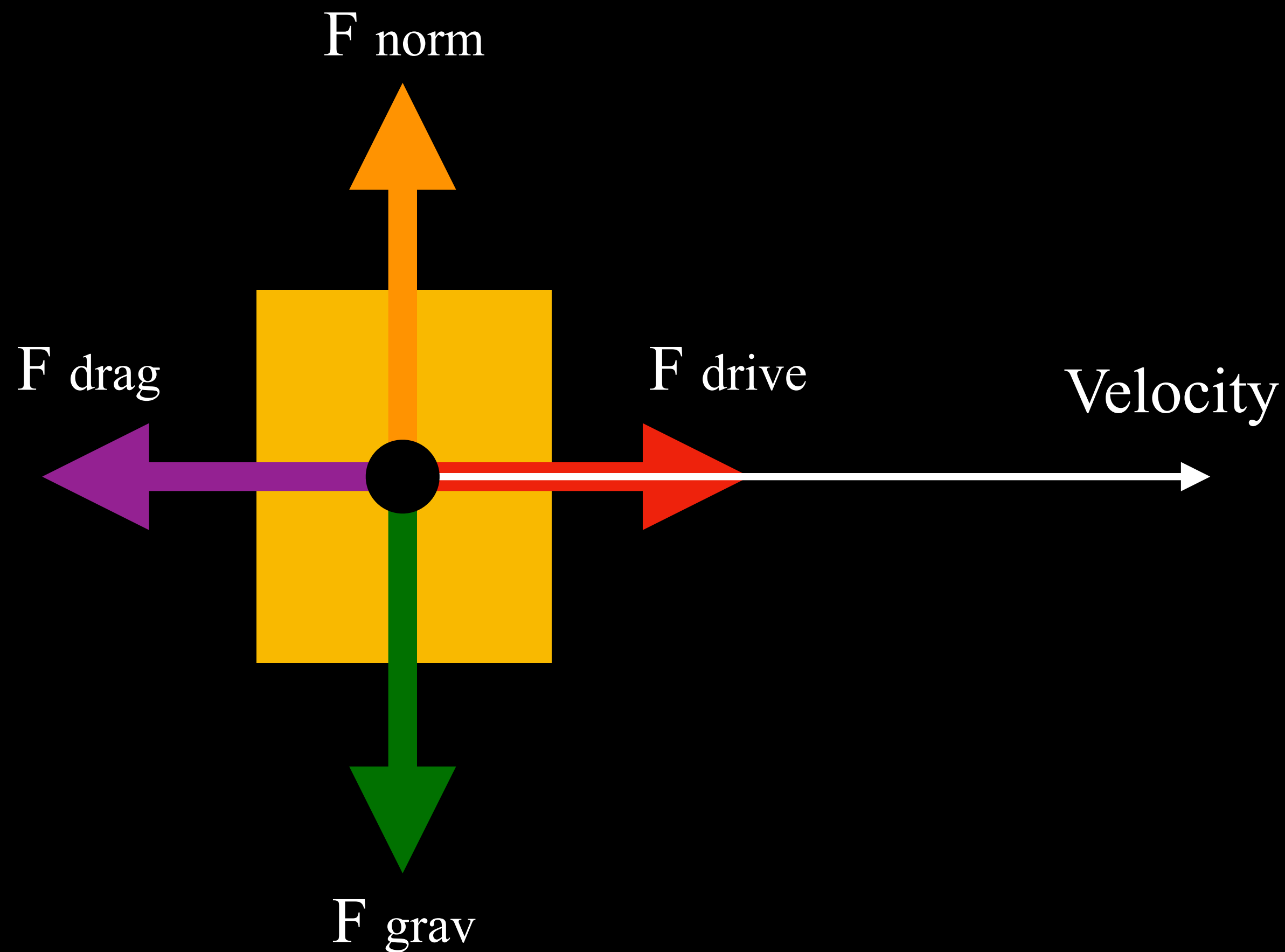


# Player

Left/right

*Because drag increases with velocity, there is a point where the drag force balances out the drive force, and the object stops accelerating. This is the terminal velocity.*



$$F_{drag} = C_{drag} |V|$$

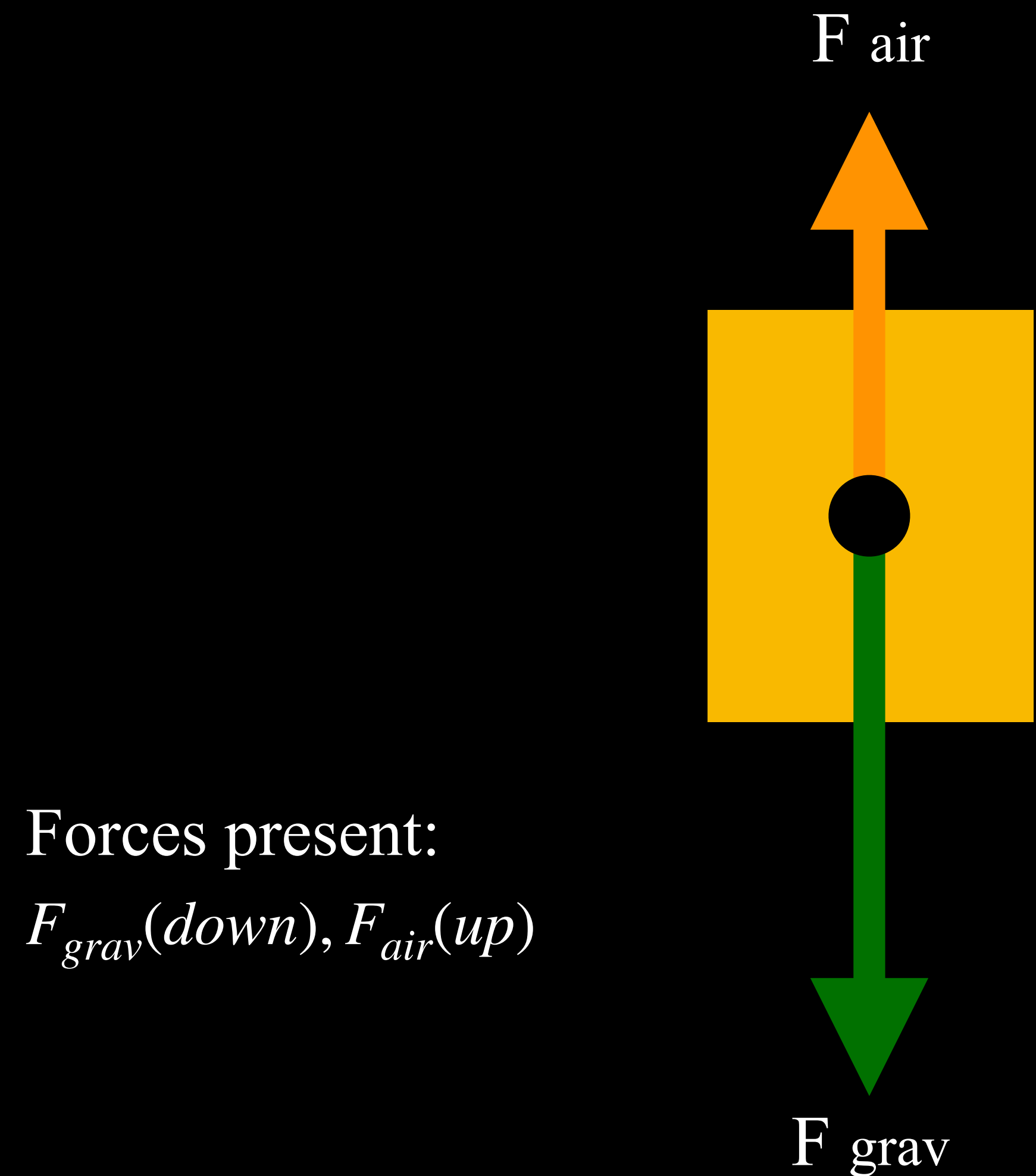
$$F_{drag} = F_{drag} |V|$$

$$C_{drag} |V| = F_{drive}$$

$$|V| = \frac{F_{drive}}{C_{drag}}$$

# Player

*The player is falling downward and speeding up.*



When the player accelerates downward, the downward force is stronger than the upward force.