Skydiver Problem

Suzie Skydiver dives from a high-flying, hovering helicopter. As she falls faster and faster through the air, how is **air resistance** affected? Does it *increase*, *decrease*, or *remain the same*?

Suzie has the force of gravity pulling her down and air resistance pushing back on her in the opposite direction. As she falls faster and faster through the air, how is the **net force** affected? Does it *increase*, *decrease*, or *remain the same*? Remember that net force is the sum of all forces acting on an object. In this case, net force is the difference between the two forces (a *positive* vector added to a *negative* vector).

As she falls faster and faster through the air, how does her **acceleration** change? Will she keep gaining speed at the rate of gravity or will she eventually stop accelerating?