



$$\frac{dz}{dt} = -136 = \dot{z}$$

$$x^2 + 1^2 = 1.5^2$$

$$x = \sqrt{1.25}$$

$$x^2 + y^2 = z^2$$

$$2x \dot{x} + 0 = 2z \dot{z}$$

$$\dot{x} = \frac{z}{x} \cdot \dot{z} = \frac{1.5}{\sqrt{1.25}} \cdot (-136) \approx -182.46$$

$$\dot{x} < 0 \Rightarrow \dot{x} = v - 120$$

where v is the velocity of the car

$$\text{So } v - 120 = -182.46$$

$$v = -62.46$$

I think this means the car is headed towards the plane at 62.46 mph