1. If \( y = x^3 + 2x \) and \( \frac{dx}{dt} = 5 \), then find \( \frac{dy}{dt} \) when \( x = 2 \).

2. Two cars start moving from the same point. One travels south at 60 mi/h and the other travels west at 25 mi/h. At what rate is the distance between the cars increasing two hours later?

3. Find the linear approximation of the function \( f(x) = \sqrt{1-x} \) at \( a = 0 \) and use it to approximate the number \( \sqrt{0.9999} \).