Roller Coaster Engineering

Starting from a stationary position, the velocity v of a roller coaster in feet per second at the bottom of a hill can be approximated by $v = \sqrt{64h}$, where h is the height of the hill in feet.

a. Simplify the equation.

b. Determine the velocity of a roller coaster at the bottom of a 134-foot hill.

c. How fast is that in miles per hour? Is it a reasonable roller coaster or too slow?

d. What does your Roller Coaster look like?