1. What is the volume of the parallelepiped which has vectors \( \langle 1, 0, 1 \rangle, \langle 1, 1, 0 \rangle \) and \( \langle 0, 1, -2 \rangle \) as adjacent edges? Show work and simplify your answer.

Volume: \[
\text{(simplify)}
\]

2. What is the height of the parallelepiped in the problem above where the base is determined by the edges formed from \( \langle 1, 1, 0 \rangle \) and \( \langle 0, 1, -2 \rangle \)? Show work and simplify your answer.

Height: \[
\text{(simplify)}
\]