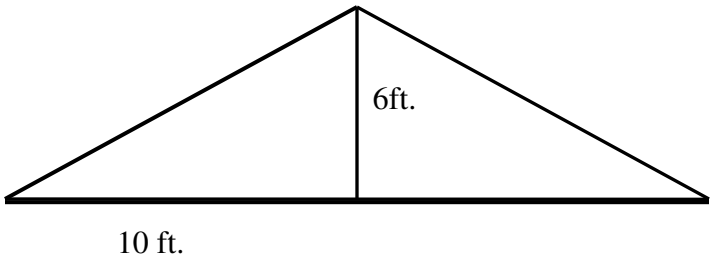
Name: _____ Period: _____ Date: _____

Geometry: Open Response **ALL work must be done in the grid below.**

1. In building a home, a contractor needs to meet the codes for the pitch (slope) of the roof and the slope of the tairs.



a. Given this roof plan, determine the slope.
b. In the new subdivision, Slopeville, the slope of the roof needs to be between -0.4 and -0.8 or 0.4 and 0.8. Would this roof plan be acceptable? Justify your answer.
c. Given the equation, $3y+4x=27$, find the slope and determine if it would be an acceptable slope for Slopeville. Justify your answer.