CS 360, Math Problem Set 4

All of these questions are based on the following geometric objects:

A = (3, 2, -5)
B = (2, 3, -5)
C = (1, 1, 1)
v = (-4, -3, 0)

1. (*0 points*) Find the surface normal for a plane going through the points ABC.

2. (*0 points*) What is the cosine of the angle between the surface normal and a directional light coming from direction v? Make sure the surface normal is facing toward the light and explain how you know.

3. (*0 points*) Will the diffuse component of the lighting computation be relatively large or small?