Distances to planes and lines

1. Using vector methods, find the distance from the point $(1,0,0)$ to the plane $2x + y - 2z = 0$. Include a 'cartoon' sketch illustrating your solution.

2. Using vector methods, find the distance from the point $(0,0)$ to the line $2x + y = 2$. Include a sketch.

18.02SC Multivariable Calculus
Fall 2010