Problem Set 3Calculus 3Due 10/8/03

Each problem is worth 5 points. For full credit indicate clearly how you reached your answer.

1. Find the point on the plane 2x + 3y + z = 12 closest to the origin.

2. Find the lowest point(s) on the paraboloid $z = x^2 + y^2$ subject to the constraint 2x + 3y = 6.