

The normals are  $\mathbf{n}_1 = \langle 2, -3, 4 \rangle$  and  $\mathbf{n}_2 = \langle 1, 6, 4 \rangle$  so the planes aren't parallel. Since  $\mathbf{n}_1 \cdot \mathbf{n}_2 = 2 - 18 + 16 = 0$ , the normals (and thus the planes) are perpendicular.