



$$X = \langle x_1, x_2, x_3 \dots x_j \dots x_N \rangle$$

$$Y = \langle y_1, y_2, y_3 \dots y_j \dots y_N \rangle$$

$$X + Y = \langle \quad , \quad , \quad , x_j + y_j, \quad \rangle$$

$$X + Y = Z$$

N of these

$$X + Y = \langle x_1 + y_1, x_2 + y_2, x_3 + y_3 \dots x_N + y_N \rangle$$

z_j = some component j in z

$$x = \langle 2, 5, -3 \rangle$$

$$y = \langle 4, 6, 10 \rangle$$

$$z = x + y$$

what is z^2 .