

$$|M_1 \cdot M_2|^2 = [X_2 - X_1]^2 + [y_2 - y_1]^2 =$$

$$= [d_{11}(X_2 - X_1) + d_{12}(y_2 - y_1)]^2 +$$

$$+ [d_{21}(X_2 - X_1) + d_{22}(y_2 - y_1)]^2 =$$

$$= (d_{11}^2 + d_{21}^2)(X_2 - X_1)^2 + (d_{12}^2 + d_{22}^2)(y_2 - y_1)^2 +$$

$$2(d_{11}d_{12} + d_{21}d_{22})(X_2 - X_1)(y_2 - y_1) =$$

$$= (X_2 - X_1)^2 + (y_2 - y_1)^2 = |M_1 M_2|^2$$