

$$\overset{x}{[1 \ 7 \ 2]} \overset{y}{\begin{bmatrix} 3 \\ 5 \\ 2 \end{bmatrix}} = 1 \times 3 + 7 \times 5 + 2 \times 2$$

$$= x_1 y_1 + x_2 y_2 + x_2 y_2$$

$$= \sum (x_i y_i)$$