If \( \mathbf{a} = 2\mathbf{i} + \mathbf{j} \) (which is the same as \((2, 1)\)) and \( \mathbf{b} = 3\mathbf{i} + 3\mathbf{j} \), compute these:

A. \( \mathbf{a} \cdot \mathbf{b} \)

B. \( ||\mathbf{b}|| \)

C. \( \text{comp}_{\mathbf{a}} \mathbf{b} \), which is the number you get when you divide your answer to A by your answer to B.

D. \( \text{proj}_{\mathbf{a}} \mathbf{b} \), which is a vector in the direction of \( \mathbf{b} \) whose length is your answer to C.