Find a · b.

a = 4i - 4j, b = 4i + 5j
a = a_1i + a_2j
b = b_1i + b_2j

Use formula for find scalar product
$$\vec{a} \cdot \vec{b} = a_1 b_1 + a_2 b_2$$

$$\vec{a} \cdot \vec{b} = 4 \cdot 4 + (-4 \cdot 5) = -4$$

Answer: -4.