

Example #2a p. 3 Ch. 9

Let $\mathbf{u} = \langle 6, -3 \rangle$ and $\mathbf{v} = \langle -14, 8 \rangle$. Find

a) $\mathbf{u} + \mathbf{v}$

Adding vectors is adding components

- Add the **horizontal** components of u & v

$$u_a + v_a = 6 + -14 = -8$$

- Add the **vertical** components of u & v

$$u_b + v_b = -3 + 8 = 5$$

Thus, $u + v$ is

$$u + v = \langle -8, 5 \rangle$$