

Zadatak 4. Ako su $A(2, 1)$, $B(-2, 4)$ i $D(0, -3)$ tri vrha paralelograma $ABCD$, odredi koordinate vrha C .

Rješenje.

$$A(2, 1),$$

$$B(-2, 4),$$

$$C(x, y),$$

$$D(0, -3),$$

$$\vec{AB} = \vec{DC} \quad (\text{paralelogram})$$

$$(-2 - 2)\vec{i} + (4 - 1)\vec{j} = (x - 0)\vec{i} + (y + 3)\vec{j}$$

$$-4\vec{i} + 3\vec{j} = x\vec{i} + (y + 3)\vec{j}$$

$$-4 = x \implies x = -4$$

$$3 = y + 3 \implies y = 0$$

$$\implies C(-4, 0).$$