

**Zadatak 51.** Nacrtaj hiperbolu  $y = \frac{1}{x}$ . U kojim su točkama tjemena te hiperbole, a u kojima žarišta?

**Rješenje.**

$$y = \frac{1}{x}$$

$$xy = 1 \implies C(0, 0)$$

$$\frac{a^2}{2} = 1 \implies a = \sqrt{2}$$

$$\text{tjemena } \dots T_1\left(0 - \frac{\sqrt{2}}{\sqrt{2}}, 0 - \frac{\sqrt{2}}{\sqrt{2}}\right) \implies T_1(-1, -1)$$

$$T_2\left(0 + \frac{\sqrt{2}}{\sqrt{2}}, 0 + \frac{\sqrt{2}}{\sqrt{2}}\right) \implies T_2(1, 1)$$

$$F_{1,2} = (\pm a, \pm a) \implies F_{1,2}(\pm\sqrt{2}, \pm\sqrt{2})$$

