

Zadatak 48. Odredi koeficijent a tako da žarište parabole $y^2 = a(x - 2)$ bude točka $F\left(\frac{1}{2}, 0\right)$.

Rješenje.

$$y^2 = a(x - 2)$$

$$\frac{F\left(\frac{1}{2}, 0\right)}{a = 2p}$$

$$T(2, 0)$$

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$$\frac{p}{2} = x_F - x_T = \frac{1}{2} - 2 = -\frac{3}{2} \implies p = -3$$

$$a = 2p \implies a = -6$$