Zadatak 64. Napiši jednadžbu pravca koji prolazi žarištima dviju parabola: $y^2 = 8x$ i $y = 4x^2$.

Rješenje.

$$P_1 \ \ldots\ y^2 = 8x \implies 2p_1 = 8,\ p_1 = 4 \implies F_1(2,0)$$

$$P_2 \ \ldots\ y = 4x^2,\ x^2 = \frac{1}{4}y \implies 2p_2 = \frac{1}{4},\quad F_2\left(0, \frac{1}{8}\right)$$

$$F_1F_1 \ \ldots\ y - 0 = \frac{\frac{1}{16} - 0}{0 - 2}(x - 2)$$

$$y = -\frac{1}{32}(x - 2)$$

$$-32y = x - 2$$

$$x + 32y - 2 = 0$$