

$$\frac{2y+3}{2y-1} = \frac{y-5}{y+3}$$

$$(2y-3)(y+3) = (y-5)(2y-1)$$

$$2y^2 + 6y - 3y - 9 = 2y^2 - y - 10y + 5$$

$$2y^2 + 3y - 9 = 2y^2 - 11y + 5$$

$$\cancel{2y^2} + 3y - \cancel{2y^2} + 11y = 5 + 9$$

$$14y = 14$$

$$y = 1$$

$$\frac{x+1}{6} + \frac{20}{x-1} = 4$$

$$x^2 - 24x + 143 = 0$$

$$D = 576 - 4 \cdot 143 =$$

$$= 576 - 572 = 4$$

$$\frac{x+1}{6} + \frac{20}{x-1} - 4 = 0$$

$$x_1 = \frac{24+2}{2} = 13$$

$$\frac{(x+1)(x-1) + 120 - 24(x-1)}{6(x-1)} = 0$$

$$x_2 = \frac{24-2}{2} = 11$$

$$\frac{x^2 - 1 + 120 - 24x + 24}{6(x-1)} = 0$$

$$\frac{x^2 - 24x + 143}{6(x-1)} = 0$$

Ответ: 13; 11.