

$$1 \quad 8\left(2x - \frac{1}{2}\right) - 12x\left(x + \frac{1}{3}\right) = 24(x - 1)^2 - (3x + 1).$$

$$2 \quad (x + 2)(x - 1) + \frac{3 - 2x}{2} = 3x - \frac{1}{2}.$$

$$3 \quad \frac{(x + 1)(x - 2)}{5} - \frac{(x - 1)(x + 2)}{2} = 3.$$

$$4 \quad (2x - 5)(x - 4) - 7 = (x - 2)(x - 3).$$

$$5 \quad \frac{x(x + 1)}{4} = \frac{x - 5}{12} + \frac{5(2x - 1)}{6}.$$

$$6 \quad \frac{2 - x}{2 + 2x} + \frac{2 + x}{2 - x} = \frac{12 + 5x}{6 + 6x};$$

$$7 \quad \frac{x + 1}{x - 1} + 2 = \frac{3 - x}{x + 3};$$

$$8 \quad \frac{4 - x}{x} - \frac{5x + 1}{x - 1} = \frac{4}{x - x^2};$$

$$9 \quad 5x\left(1 + \frac{1}{x} + \frac{1}{5x}\right) = \frac{5x}{x - 1} + 6;$$

$$10 \quad \left(\frac{x - 1}{x + 1}\right)^2 - 5 \cdot \frac{x - 1}{x + 1} + 6 = 0.$$

$$11 \quad \left(1 - \frac{x}{x - 1}\right)^2 - \left(x - \frac{1}{x + 1}\right)\left(x + \frac{1}{x + 1}\right) = \frac{3 + x^2 - x^4}{x^2 - 1}.$$

$$12 \quad \left(x - \frac{1}{2}\right)^2 + \frac{1}{4} = \frac{x + 2}{2};$$

$$13 \quad \frac{7 - x}{3x - 5} + \frac{x - 2}{2(x + 1)} = \frac{9}{8};$$

$$14 \quad \frac{6 - x}{3x - 2} - \frac{2x + 1}{2(x + 2)} = \frac{13}{8};$$

$$15 \quad \frac{3 - x}{x + 1} + \frac{5}{4x} = \frac{9}{4};$$