

1.3

$$1) \quad \frac{x}{4} + 0,943 = \frac{19}{10}x - 6,812 \quad | \cdot 1000$$

$$250x + 943 = 1900x - 6812$$

$$-1650x = -7755$$

$$x = \frac{-7755}{-1650} = \frac{47}{10}$$

$$S = \left\{ \frac{47}{10} \right\}$$

$$2) \quad \frac{3x-1}{2} - \frac{4-x}{4} = 0 \quad | \cdot 4$$

$$2(3x-1) - (4-x) = 0$$

$$6x - 2 - 4 + x = 0$$

$$7x = 6$$

$$x = \frac{6}{7}$$

$$S = \left\{ \frac{6}{7} \right\}$$

$$3) \quad \frac{1}{8} \left(\frac{x}{10} + \frac{1}{2} \right) = \frac{1}{40}(7x-30)$$

$$\frac{x}{80} + \frac{1}{16} = \frac{7x-30}{40} \quad | \cdot 80$$

$$x + 5 = 2(7x-30)$$

$$x + 5 = 14x - 60$$

$$-13x = -65$$

$$x = \frac{-65}{-13} = 5$$

$$S = \{5\}$$

$$4) \quad \frac{x}{6} - \frac{2x-1}{6} = \frac{1}{3} \left(\frac{2}{5} - \frac{x}{3} \right)$$

$$\frac{x}{6} - \frac{2x-1}{6} = \frac{2}{15} - \frac{x}{9} \quad | \cdot 90$$

$$15x - 15(2x-1) = 12 - 10x$$

$$15x - 30x + 15 = 12 - 10x$$

$$-5x = -3$$

$$x = \frac{-3}{-5} = \frac{3}{5}$$

$$S = \left\{ \frac{3}{5} \right\}$$

$$5) \quad \frac{4x-2}{3} - \frac{30x-5}{12} = \frac{1}{12} - \frac{5x}{4} \quad | \cdot 12$$

$$4(4x-2) - (30x-5) = 1 - 15x$$

$$16x - 8 - 30x + 5 = 1 - 15x$$

$$x = 4$$

$$S = \{4\}$$

$$6) \quad 3(4(3+x) - (5x-4)) - (3-6x) = 0$$

$$3(12 + 4x - 5x + 4) - 3 + 6x = 0$$

$$3(-x + 16) - 3 + 6x = 0$$

$$-3x + 48 - 3 + 6x = 0$$

$$3x = -45$$

$$x = \frac{-45}{3} = -15$$

$$S = \{-15\}$$