

Vergelijkingen LWB blz. 43 e.v.

$$\textcircled{39} \text{ b) } \frac{2}{9} (3z - 4) + \frac{1}{3} (2z + 3) = 0$$

$$\frac{2}{3} z - \frac{8}{9} + \frac{2}{3} z + \frac{1}{1} = \frac{0}{1}$$

$$\frac{6}{9} z - \frac{8}{9} + \frac{6}{9} z + \frac{9}{9} = \frac{0}{9}$$

$$6z + 6z = 0 + 8 - 9$$

$$12z = -1$$

$$z = \frac{-1}{12}$$

$$\textcircled{39} \text{ d) } \frac{2}{3} \left(x - \frac{3}{4}\right) = 3 \cdot \left(\frac{1}{10} - x\right)$$

$$\frac{2}{3} x - \frac{1}{2} = \frac{3}{10} - \frac{3x}{1}$$

$$\frac{20}{30} x - \frac{15}{30} = \frac{9}{30} - \frac{90x}{30}$$

$$20x + 90x = 9 + 15$$

$$110x = 24$$

$$x = \frac{24}{110}$$

$$x = \frac{12}{55}$$

$$\textcircled{39} \text{ j) } \frac{2}{3} (3x - 4) = \frac{-1}{3} (2x + 3)$$

$$2x - \frac{8}{3} = -\frac{2}{3}x - \frac{1}{1}$$

$$\frac{6x}{3} - \frac{8}{3} = \frac{-2x}{3} - \frac{3}{3}$$

$$6x + 2x = -3 + 8$$

$$8x = 5$$

$$\textcircled{x = \frac{5}{8}}$$

$$\textcircled{40} \text{ a) } \frac{x+2}{6} = \frac{x-5}{4}$$

$$\frac{x}{6} + \frac{2}{6} = \frac{x}{4} - \frac{5}{4}$$

$$\frac{2x}{12} + \frac{4}{12} = \frac{3x}{12} - \frac{15}{12}$$

$$2x - 3x = -15 - 4$$

$$-x = -19$$

$$\textcircled{x = 19}$$

$$\textcircled{40} \text{ c) } \frac{y-4}{3} - \frac{y+3}{5} = \frac{y}{15}$$

$$\frac{y}{3} - \frac{4}{3} - \frac{y}{5} - \frac{3}{5} = \frac{y}{15}$$

$$\frac{5y}{15} - \frac{20}{15} - \frac{3y}{15} - \frac{9}{15} = \frac{y}{15}$$

$$5y - 3y - y = 20 + 9$$

$$y = 29$$

$$\textcircled{40} \text{ e) } \frac{3x-7}{5} = \frac{1}{6} + 2x$$

$$\frac{3x}{5} - \frac{7}{5} = \frac{1}{6} + \frac{2x}{1}$$

$$\frac{18x}{30} - \frac{42}{30} = \frac{5}{30} + \frac{60x}{30}$$

$$18x - 60x = 5 + 42$$

$$-42x = 47$$

$$x = \frac{-47}{42}$$