ROVNICE – opakování (M-08-04)

Řešte rovnice a provádějte zkoušky.

1) $\frac{3x-1}{2} + 1 = x - \frac{2-x}{3}$ /.2,.3

$3(3x-1) + 6 = 6x - 2(2-x)$

$9x - 3 + 6 = 6x - 4 + 2x$

$9x + 3 = 8x - 4$

$9x - 8x = -4 - 3$

$\underline{\underline{X = -7}}$

Zkouška: $L = \frac{-21-1}{2} + 1 = -11 + 1 = \underline{\underline{-10}}$

$P = -7 - \frac{2-(-7)}{3} = -7 - \frac{9}{3} = -7 - 3 = \underline{\underline{-10}}$ **L = P**

2) $(2x - 3).(x+5) + 7 = (x-4)(2x-1) + 20$

$2x^2 + 10x - 3x - 15 + 7 = 2x^2 - x - 8x + 4 + 20$

$2x^2 + 7x - 8 = 2x^2 - 9x + 24$

$2x^2 - 2x^2 + 7x + 9x = 24 + 8$

$16x = 32$ /: 16

$\underline{\underline{X = 2}}$

Zkouška: L = (2.2 – 3) . (2 + 5) + 7 = 1 . 7 + 7 = 7 + 7 = 14

P = (2 – 4) . (2.2 – 1) + 20 = (-2) . 3 + 20 = - 6 + 20 = 14

L = P

3) $5.(x + \frac{1}{2}) = 4.(x-\frac{1}{3})$

$5x + \frac{5}{2} = 4x - \frac{4}{3}$ /. 3, . 2

$30x + 15 = 24x - 8$

$30x - 24x = -8 - 15$

$6x = -23$ /:6

$X = -\frac{23}{6}$

$X = -3\frac{5}{6}$

Zkouška: $L = 5.(-\frac{23}{6}+\frac{1}{2}) = 5.(-\frac{23}{6}+\frac{3}{6}) = 5 . (-\frac{20}{6}) = -\frac{100}{6} = -16\frac{4}{6} =$

$= \mathbf{-16}\frac{2}{3}$

$P = 4.(-\frac{23}{6} - \frac{1}{3}) = 4.(-\frac{23}{6} - \frac{2}{6}) = 4.(-\frac{25}{6}) = -\frac{100}{6} = -16\frac{4}{6} =$

$= \mathbf{- \ 16}\frac{2}{3}$

L = P