

ROVNICE + MNOHOČLENY - úkol 2

řešení

① $\frac{5x-1}{3} = \frac{x+2}{2} + 1 \quad | \cdot 6 \quad \underline{\underline{2k}} \therefore L = \frac{5x-1}{3} \quad P = \frac{x+2}{2} + 1$

$$\begin{array}{lcl} 2(5x-1) & = & 3(x+2)+6 \\ 10x-2 & = & 3x+6+6 \\ 10x-2 & = & 3x+12 \\ 10x-3x & = & 12+2 \\ 7x & = & 14 \\ \underline{\underline{x}} & = & \underline{\underline{2}} \end{array}$$
$$\begin{array}{lcl} L & = & \frac{10-1}{3} \\ L & = & \frac{9}{3} \\ \underline{\underline{L}} & = & \underline{\underline{3}} \end{array}$$
$$\begin{array}{lcl} P & = & \frac{2+2}{2} + 1 \\ P & = & \frac{4}{2} + 1 \\ P & = & 2+1 \\ \underline{\underline{P}} & = & \underline{\underline{3}} \end{array}$$

$\underline{\underline{L=P}}$

② a) $(p+7) \cdot (p+11) = p^2 + 11p + 7p + 77 = p^2 + 18p + 77$

b) $(3a+2) \cdot (a+4) = 3a^2 + 12a + 2a + 8 = 3a^2 + 14a + 8$

c) $(k-2) \cdot (k+5) = k^2 + 5k - 2k - 10 = k^2 + 3k - 10$

d) $(u-5) \cdot (u+5) = u^2 - 25$

e) $(2h+8) \cdot (h+2) = 2h^2 + 4h + 8h + 16 = 2h^2 + 12h + 16$

f) $(b+11) \cdot (b-11) = b^2 - 121$

*3 a) $(x^2+3x+5) \cdot (x-4) = x^3 - 4x^2 + 3x^2 - 12x + 5x - 20 = x^3 - x^2 - 7x - 20$

b) $(a+2b) \cdot (3a+4) = 3a^2 + 4a + 6ab + 14b$

c) $(m-5) \cdot (m^2 - 5m + 1) = m^3 - 5m^2 + m - 5m^2 + 25m - 5 = m^3 - 10m^2 + 26m - 5$

d) $(3g+1) \cdot (3g-1) = 9g^2 - 1$

e) $(c-0,5) \cdot (c+0,5) = c^2 - 0,25$