

Test - 35 minut

výborně 13 - 12

chvalitebně 11 - 9

dobře 8 - 5

dostatečně 4 - 3

nedostatečně 2 - 0

1. Řešte a proveďte zkoušku.

[3 x 1 bod]

a) $\frac{1}{4}x + 5 = 3$ 1, 4

$x + 20 = 12 \quad | -20$

$x = 12 - 20$

$x = -8$

2l. $L = \frac{1}{4} \cdot (-8) + 5 = 3$

$P = 3$

$L = P$

b) $6 - \frac{1}{2}y = 1$ 1, 2

$12 - y = 2 \quad | -12$

$-y = 2 - 12$

$-y = -10 \quad | :(-1)$

$y = 10$

2l. $L = 6 - \frac{1}{2} \cdot 10 = 6 - 5 = 1$

$P = 1$

$L = P$

c) $2 \cdot (x + 5) = 20$

$2x + 10 = 20 \quad | -10$

$2x = 20 - 10$

$2x = 10 \quad | :2$

$x = 5$

2l. $L = 2 \cdot (5 + 5) = 20$

$P = 20$

$L = P$

d) $\frac{3}{4} \cdot (u - 3) = \frac{1}{3} \cdot (2u - 5)$ 1, 12

$9 \cdot (u - 3) = 4 \cdot (2u - 5)$

$9u - 27 = 8u - 20$

$9u - 8u = -20 + 27$

$u = 7$

2l. $L = \frac{3}{4} \cdot (7 - 3) = \frac{3}{4} \cdot \frac{4}{1} = 3$

$P = \frac{1}{3} \cdot (2 \cdot 7 - 5) = \frac{1}{3} \cdot \frac{9}{1} = 3$

$L = P$

[2 body]

e) $\frac{1}{2}x - 2\frac{1}{3} = -1\frac{1}{3}$

$\frac{1}{2}x - \frac{6}{3} = -\frac{4}{3} \quad | +6$

$3x - 14 = -8$

$3x = -8 + 14$

$3x = 6 \quad | :3$

$x = 2$

2l. $L = \frac{1}{2} \cdot 2 - \frac{7}{3} = 1 - \frac{7}{3} = \frac{3-7}{3} = -\frac{4}{3}$

$P = -\frac{4}{3}$

$L = P$

[2 body]

f) $\frac{5a-1}{6} - \frac{3a-1}{4} = \frac{1}{12} \cdot (a+1)$ 1, 12

$2(5a-1) - 3(3a-1) = 1 \cdot (a+1)$

$10a - 2 - 9a + 3 = a + 1$

$10a - 9a - a = 1 + 2 - 3$

$0 = 0$

nekonečně mnoho
řešení

[3 body]

g) $1 - \frac{2x-5}{6} = 3 - \frac{x}{4}$ 1, 12

$12 - 2(2x-5) = 36 - 3x$

$12 - 4x + 10 = 36 - 3x$

$-4x + 3x = 36 - 12 - 10$

$-x = 14 \quad | :(-1)$

$x = -14$

2l. $L = 1 - \frac{2 \cdot (-14) - 5}{6} = 1 - \frac{-33}{6} =$

$= 1 + \frac{33}{6} = \frac{2+11}{2} = \frac{13}{2}$

$P = 3 - \frac{-14}{4} = 3 + \frac{7}{2} = \frac{6+7}{2} = \frac{13}{2}$

$L = P$

[3 body]