

Reši enačbe:

Str. 59, nal. 70	
<p>a) $(2-x)x + x^2 = 0$</p> $2x - x^2 + x^2 = 0$ $2x = 0 / : 2$ $\underline{x = 0}$	<p>b) $\frac{x(2x-1)}{2} = x^2 + 1 / \cdot 1$</p> $x(2x-1) = 2(x^2 + 1)$ $2x^2 - x = 2x^2 + 2$ $-x = 2 / (-1)$ $\underline{x = -2}$
<p>c) $x(2x-3) = 2x(x-1) - 1$</p> $2x^2 - 3x = 2x^2 - 2x - 1$ $-3x + 2x = -1$ $-x = -1 / (-1)$ $\underline{x = 1}$	<p>č) $0,25x + 0,5x + 3 = 0 / \cdot 100$</p> $25x + 50x + 300 = 0$ $75x = -300 / : 5$ $15x = -60 / : 15$ $\underline{x = -4}$
Str. 59, nal. 71	
<p>a) $\frac{x}{3} + \frac{x}{5} + \frac{x}{6} = 21 / \cdot 30$ (celo enačbo množim s skupnim imenovalcem)</p> $10x + 6x + 5x = 630$ $21x = 630 / : 21$ $\underline{x = 30}$	
<p>b) $\frac{x}{5} - \frac{x}{3} + 2 = 0 / \cdot 15$</p> $3x - 5x + 30 = 0$ $-2x = -30 / (-1)$ $2x = 30 / : 2$ $\underline{x = 15}$	

Str. 59 nal. 74	
<p>a) $(x+3)^2 - (x-3)^2 = 18$</p> $x^2 + 6x + 9 - (x^2 - 6x + 9) = 18$ $x^2 + 6x + 9 - x^2 + 6x - 9 = 18$ $12x = 18 / : 6$ $2x = 3 / : 2$ $x = \frac{3}{2}$	<p>UPORABIM:</p> $(a \pm b)^2 = a^2 \pm 2ab + b^2$
<p>b) $(x-2)^3 - (x^2 - 5x)(x-1) = 2 - 3x$</p> $x^3 - 6x^2 + 12x - (x^3 - x^2 - 5x^2 + 5x) = 2 - 3x$ $-8 + 7x = 2 - 3x$ $10x = 10$ $x = 1$	<p>UPORABIM</p> $(a \pm b)^3 = a^3 \pm 3a^2b + 3ab^2 \pm b^3$
Str. 59 nal. 75	
<p>a) $0,6x - 0,\overline{6}x = \frac{2}{3}$</p> $0,6x - \frac{2}{3}x = \frac{2}{3}$ $\frac{6}{10}x - \frac{2}{3}x = \frac{2}{3}$ $\frac{3}{5}x - \frac{2}{3}x = \frac{2}{3} / \cdot 15$ $9x - 10x = 10$ $-x = 10$ $x = -10$	<p>Najprej napišem periodično število $0,\overline{6}$ z ulomkom.</p> $0,\overline{6} = t / \cdot 10$ $\overline{6,6} = 10t \quad \text{enačbi med seboj odštejemo}$ $6 = 9t / : 3$ $2 = 3t / : 3$ $t = \frac{2}{3}$
<p>b) $2(x + \frac{2}{3}) = 2\frac{2}{3}$</p> $2x + \frac{4}{3} = \frac{8}{3} / \cdot 3$ $6x + 4 = 8$ $6x = 4 / : 2$ $3x = 2 / : 3$ $x = \frac{2}{3}$	

Str. 59 nal. 76

a) $\frac{1}{3}(x+16) = 5\frac{1}{3}$

$$\frac{1}{3}x + \frac{16}{3} = \frac{16}{3} / \cdot 3$$

$$x + 16 = 16$$

$$\underline{x = 0}$$

b) $0,75x + \frac{3}{4}x = 2$

$$\frac{75}{100}x + \frac{3}{4}x = 2$$

$$\frac{3}{4}x + \frac{3}{4}x = 2 / \cdot 4$$

$$3x + 3x = 8$$

$$6x = 8 / : 2$$

$$3x = 4 / : 3$$

$$\underline{x = \frac{4}{3}}$$