

PRAŠTEVILA Σ SESTAVLJENA ŠT.

$$176) \begin{array}{r|l} a) & 72 & 2 \\ & 36 & 2 \\ & 18 & 2 \\ & 9 & 3 \\ & 3 & 3 \\ & 1 & 3 \end{array}$$

$$72 = 2^3 \cdot 3^2$$

$$b) \begin{array}{r|l} 116 & 2 \\ 58 & 2 \\ 29 & \end{array}$$

$$116 = 2^2 \cdot 29$$

$$c) \begin{array}{r|l} 765 & 5 \\ 153 & 3 \\ 51 & 3 \\ 17 & 17 \\ 1 & \end{array}$$

$$765 = 5 \cdot 3^2 \cdot 17$$

$$č) \begin{array}{r|l} 1485 & 5 \\ 297 & 3 \\ 99 & 3 \\ 33 & 3 \\ 11 & 11 \\ 1 & \end{array}$$

$$1485 = 5 \cdot 3^3 \cdot 11$$

$$d) \begin{array}{r|l} 3240 & 5 \\ 648 & 2 \cdot \checkmark \\ 324 & 2 \cdot \checkmark \\ 162 & 2 \cdot \checkmark \\ 81 & 3 \cdot \checkmark \\ 27 & 3 \cdot \checkmark \\ 9 & 3 \cdot \checkmark \\ 3 & 3 \cdot \checkmark \\ 1 & \end{array}$$

$$3240 = 5 \cdot 2^3 \cdot 3^4$$

$$e) \begin{array}{r|l} 35010 & 5 \\ 7002 & 2 \\ 3501 & 3 \\ 1167 & 3 \\ 389 & \end{array}$$

$$35010 = 5 \cdot 2 \cdot 3^2$$

$$177) \underline{30} \Rightarrow 30, 1, 2, 15, 5, 6, 3, 10$$

$$b) \underline{57} \Rightarrow 1, 57, 3, 19$$

$$c) \underline{61} \Rightarrow 1, 61$$

$$č) \underline{108} \Rightarrow 1, 108, 3, 36, 9, 12, 18, 6, 4, 27, 2, 54$$

$$d) \underline{282} \Rightarrow 141, 2, 94, 3, 282, 1, 6, 47$$

$$\Rightarrow 283 \Rightarrow 1, 283$$

$$178) \text{ a) } (2 \wedge 7) \mid x \quad x = 14 \quad \text{c) } 3,5 \wedge 12 \mid 12_{\text{mm}}$$

$$\text{ b) } (2,3 \wedge 5) \mid x \quad x = 30 \quad \text{c) } 12,15 \wedge 18 \mid 180_{\text{mm}}$$

$$179) 2^x \mid 24; \quad x = 2^{\text{①}}, 2^{\text{②}}, 2^{\text{③}}$$

$$2^x \mid 160; \quad 2^1, 2^2, 2^3, 2^4, 2^5$$

$$2^x \mid 384; \quad 2^1, 2^2, 2^3, 2^4, 2^5, 2^6, 2^7$$

$$2^x \mid 5120; \quad 2^1, 2^2, 2^3, 2^4, 2^5, 2^6, 2^7, 2^8, 2^9, 2^{10}$$

$$181) 504 \leftarrow \text{deljitelj (+) 2i so ve\u0107in. } \frac{1}{3}, 9, 9, 18, 36, 63, 72, 126, 252, 504$$

$$180) 42: 3, 6, 21, 42$$

$$45: 3, 9, 15, 45$$

$$144: 3, 6, 9, 12, 18, 24, 72, 144$$

$$162: 3, 6, 9, 18, 27, 54, 81, 162$$

$$182) 1, 3, 5, 7, 9 = 3 \text{ umestno \u0161l.}$$

$$\text{ a) Deljivo s 5 } \quad \underline{\quad} \underline{\quad} \underline{\quad} \underline{\quad} \underline{\quad} \left. \begin{array}{l} 135, 315, 795, 975, 175, 715, 195, 915, 375 \\ 395, 935 \end{array} \right\}$$

$$\text{ b) deljivo s 9 } = 135, 153, 315, 351, 513, 531$$

$$\text{ c) s 3 imne 9 } = \begin{array}{l} 7 \frac{1}{3} 9 \\ 5 \\ 9 \frac{1}{3} 7 \end{array} \left. \begin{array}{l} 12 \text{ koub, } 713, 731, 715, 751, 735, 753, 913, 931, 935, 953, 915, 915, 9 \\ 597, 975, 957 \end{array} \right\}$$

$$183) a) 3x^2 \Rightarrow 1, 3, x, x^2, 3x, 3x^2$$

$$b) 4a^2b \Rightarrow 1, 4, 2, a, a^2, b, ab, a^2b, 4a^2b, 4ab, 4b, 2a, 2b, 4a, 4b, 4a^2, 2ab, 2a^2b$$

$$c) a^2 + 7a + 10 = (a+2)(a+5) \Rightarrow (a+2), (a+5), 1, (a^2 + 7a + 10)$$

$$d) x^2 - 11x - 42 \Rightarrow (x-14)(x+3), 1, (x^2 - 11x - 42)$$

$$e) 20 + 21u + u^2 = (u+20)(u+1), 1, (u^2 + 21u + 20)$$

$$f) 27y^2 - 3x^2 = 3(9y^2 - x^2) \Rightarrow 3, (3y-x), (3y+x), 1, 27y^2 - 3x^2$$

$$g) w^3 + 3w^2 - 18w = w(w^2 + 3w - 18) = w(w+6)(w-3), 1, (w^3 + 3w^2 - 18w)$$

$$184) m > 2$$

$$3m^3 + 3m^2 - 18m = 3m(m^2 + m - 6) = 3m(m+3)(m-2) \Rightarrow \text{set analysis}$$

$$\{1, 3m, (m^2 + m - 6), (m+3), (m-2), (3m^3 + 3m^2 - 18m)\}$$

$$185) 4a - (2-a)^2 - (3-a)(a+6) = \dots =$$

$$a) 4a - (4 - 4a + a^2) - (3a + 18 - a^2 - 6a) =$$

$$= 4a - 4 + 4a - a^2 - 3a - 18 + a^2 + 6a = 11a - 22 = \underline{11(a-2)}$$

$$b) \begin{array}{c|cccccc} a & 0 & 1 & 2 & 3 & 4 & 5 & 6 \\ \hline & -22 & -11 & 0 & 11 & 22 & 33 & 44 \end{array}$$

$$a > 3$$

$$c) a = 3(11)$$

186) $(2m-1)^2 - (3-m)(2m+4) - 1$

a) $4m^2 - 4m - 1 - (6m + 12 - 2m^2 - 4m) - 1 =$
 $= 4m^2 - 4m - 1 - 6m - 12 + 2m^2 + 4m - 1 =$
 $= 6m^2 - 6m + 12 = 6(m^2 - m + 12) = 6(m-3)(m+4)$

b)

	1	2	3	4	5	
	$6 \cdot (-2) \cdot (5)$	$6 \cdot (-1) \cdot (6)$	0	$6 \cdot 1 \cdot 8$	$6 \cdot 2 \cdot 9$	$a > 3$
	-60	-36	0	48	108	
				✓	✓	

c) $n=100$

$6 \cdot (100-3)(100+4) = 6 \cdot 97 \cdot 104 = 60.528$

Deljitelji: $\begin{array}{r} 6 \overline{) 2} \\ 3 \overline{) 3} \\ \uparrow \end{array}$ 97

6	1, 2, 3, 6, 60528, 30264
9	26176, 10088, 97, 624
15	104, 582, 4, 1532, 8, 4596
21	12, 5044, 13, 4656, 16, 3785
26	24, 2522, 26, 2328, 39
31	1552, 48, 1261, 52, 1164

(še 5)