

1. - 8. 4. 2020

ŘEŠENÍ

- 1) a) 18; 36; 42; 78; 444; 910; 1100; 7432
 b) 18; 21; 36; 42; 78; 444
 c) 95; 910; 1100
 d) 910; 1100
 e) 36; 72; 444; 1100; 7432
 f) 18; 36; 42; 78; 444
 g) 18; 36

2) 135; 145; 155; 165; 175

3) 6354 (vynechána 1); 6315 (vynechána 4)

4) 3420; 3024; 3924; 3528

5) 372; 378

6) číslice: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9

číslo je složeno z číslic

prvočíslo je číslo dělitelné 1 a samo sebou

7)

| | |
|------|----|
| 6006 | 2 |
| 3003 | 3 |
| 1001 | 7 |
| 143 | 11 |
| 13 | 13 |
| (1) | |

$$6006 = \underline{\underline{2 \cdot 3 \cdot 7 \cdot 11 \cdot 13}}$$

8) a) $m(140; 420) = 140 \cdot 3 = \underline{\underline{420}}$

| | | | | | |
|-----|--|---|-----|--|---|
| 140 | | 2 | 420 | | 2 |
| 70 | | 2 | 210 | | 2 |
| 35 | | 5 | 105 | | 3 |
| 7 | | 7 | 35 | | 5 |
| (1) | | | 7 | | 7 |
| | | | (1) | | |

140 = (2)(2)(5)(7)
 420 = ~~2~~·~~2~~·(3)·~~5~~·~~7~~

b) $m(16; 112; 176) = 16 \cdot 77 = \underline{\underline{1232}}$

| | | | | | | | | |
|--------------|--|--------------|-----|--|---|-----|--|----|
| 16 | | 2 | 112 | | 2 | 176 | | 2 |
| 8 | | 2 | 56 | | 2 | 88 | | 2 |
| 4 | | 2 | 28 | | 2 | 44 | | 2 |
| 2 | | 2 | 14 | | 2 | 22 | | 2 |
| (1) | | | 7 | | 7 | 11 | | 11 |
| | | | (1) | | | (1) | | |

16 = (2)(2)(2)(2)
 112 = ~~2~~·~~2~~·~~2~~·~~2~~·(7)
 176 = ~~2~~·~~2~~·~~2~~·~~2~~·(11)

9) a) $D(432; 532) = \underline{\underline{4}}$

| | | | | | |
|-----|--|---|-----|--|----|
| 432 | | 2 | 532 | | 2 |
| 216 | | 2 | 266 | | 2 |
| 108 | | 2 | 133 | | 7 |
| 54 | | 2 | 19 | | 19 |
| 27 | | 3 | (1) | | |
| 9 | | 3 | | | |
| 3 | | 3 | | | |
| (1) | | | | | |

432 = 2·2·~~2~~·~~2~~·~~2~~·~~2~~·~~2~~
 532 = ~~2~~·~~2~~·7·~~19~~

b) $D(96; 144; 168) = \underline{\underline{24}}$

96 = 2·2·2·~~2~~·~~2~~·3
 144 = ~~2~~·~~2~~·~~2~~·~~2~~·~~2~~·~~2~~·3
 168 = ~~2~~·~~2~~·2·~~2~~·~~2~~·~~3~~