

■ Rješenja zadataka 1.3 ■

Zadatak 1. Izračunaj:

1) $7! + 8! + 9!;$ 2) $12! - 1;$

3) $\frac{25!}{20!};$ 4) $\frac{7! - 6!}{120}.$

Rješenje. 1) $7! + 8! + 9! = 7! + 7! \cdot 8 + 7! \cdot 8 \cdot 9 = 7!(1 + 8 + 72) = 5040 \cdot 81 = 408\,240;$

2) $12! - 1 = 479\,001\,599;$

3) $\frac{25!}{20!} = \frac{20! \cdot 21 \cdot 22 \cdot 23 \cdot 24 \cdot 25}{20!} = 6\,375\,600;$

4) $\frac{7! - 6!}{120} = \frac{6! \cdot 7 - 6!}{5!} = \frac{6!(7 - 1)}{5!} = \frac{5! \cdot 6 \cdot 6}{5!} = 6 \cdot 6 = 36.$