

$$4) \frac{1.05 + \frac{3}{4}}{\left(7.5 - \frac{10}{3}\right) \cdot 0.6} \text{ od } \frac{\left(\frac{38}{3} - \frac{97}{9}\right) \cdot \frac{27}{17}}{\left(4 - \frac{7}{3}\right) : \frac{40}{9}} + \frac{\left(\frac{1}{5} + 0.75\right) : \frac{1}{20}}{1 - \frac{80}{99}}$$

19. Izračunaj na najbrži mogući način (bez računala):

$$1) \frac{254 \cdot 399 - 145}{254 + 399 \cdot 253}; \quad 2) \frac{5932 \cdot 6001 - 69}{5932 + 6001 \cdot 5931};$$

$$3) \frac{423\,134 \cdot 846\,267 - 423\,133}{423\,133 \cdot 846\,267 + 423\,134}; \quad 4) \frac{1985 \cdot 2717 - 732}{1984 \cdot 732 + 1985^2};$$

$$5) \frac{1}{1 \cdot 2} + \frac{1}{2 \cdot 3} + \frac{1}{3 \cdot 4} + \dots + \frac{1}{7 \cdot 8} + \frac{1}{8 \cdot 9} + \frac{1}{9 \cdot 10};$$

$$6) \frac{1}{1 \cdot 3} + \frac{1}{3 \cdot 5} + \frac{1}{5 \cdot 7} + \dots + \frac{1}{95 \cdot 97} + \frac{1}{97 \cdot 99} + \frac{1}{99 \cdot 101};$$

$$7) \frac{1}{1 \cdot 4} + \frac{1}{4 \cdot 7} + \dots + \frac{1}{25 \cdot 28} + \frac{1}{28 \cdot 31};$$

$$8) \frac{1}{1 \cdot 5} + \frac{1}{5 \cdot 9} + \dots + \frac{1}{33 \cdot 37} + \frac{1}{37 \cdot 41};$$

$$9) \frac{1}{20} + \frac{1}{30} + \frac{1}{42} + \frac{1}{56} + \frac{1}{72} + \frac{1}{90} + \frac{1}{110} + \frac{1}{132};$$

$$10) 72 \left(\frac{1}{2 \cdot 9} + \frac{1}{9 \cdot 16} + \dots + \frac{1}{58 \cdot 65} + \frac{1}{65 \cdot 72} \right);$$

$$11) 10\,101 \cdot \left(\frac{5}{111\,111} + \frac{5}{222\,222} - \frac{4}{3 \cdot 7 \cdot 11 \cdot 13 \cdot 37} \right);$$

$$12) 333 \cdot \left(\frac{71}{111\,111} + \frac{573}{222\,222} - \frac{2}{3 \cdot 7 \cdot 37} \right);$$

$$13) \left(1 - \frac{1}{4}\right) \left(1 - \frac{1}{9}\right) \dots \left(1 - \frac{1}{81}\right) \left(1 - \frac{1}{100}\right);$$

$$14) \left(1 + \frac{1}{3}\right) \left(1 + \frac{1}{3^2}\right) \left(1 + \frac{1}{3^4}\right) \left(1 + \frac{1}{3^8}\right);$$

$$15) \left(1 + \frac{1}{1 \cdot 3}\right) \left(1 + \frac{1}{2 \cdot 4}\right) \left(1 + \frac{1}{3 \cdot 5}\right) \left(1 + \frac{1}{4 \cdot 6}\right) \left(1 + \frac{1}{5 \cdot 7}\right) \cdot \\ \cdot \left(1 + \frac{1}{6 \cdot 8}\right) \left(1 + \frac{1}{7 \cdot 9}\right) \left(1 + \frac{1}{8 \cdot 10}\right).$$