Es. Pag. 46 (assegnati in classe)

N° 322 $\sqrt{\left[\left(6^2\right)^3 : 6^3 : 6^2 + 7^2 - 7 \cdot 5\right]^2 : 10^2 - \left[\left(2^2 \cdot 5 - 2^2 \cdot 3\right)^2 : \left(2^3\right)^2 - 7^0\right]} =$

$\sqrt{\left[\ 6^6 : 6^3 : 6^2 + 49 - 35\right]^2 : 10^2 - \left[(4 \cdot 5 - 4 \cdot 3)^2 : 2^6 - 1\right]} =$

$= \sqrt{\left[\ 6 + 49 - 35\right]^2 : 10^2 - \left[(20 - 12)^2 : 64 - 1\right]} =$

$= \sqrt{\left[\ 55 - 35\right]^2 : 10^2 - \left[\ 8^2 : 64 - 1\right]} =$

$\sqrt{\ 20^2 : 10^2 - [64 : 64 - 1]} =$

$\sqrt{(20 : 10)^2 - [1 - 1]} = \sqrt{2^2 - 0} = \sqrt{4} = 2$

N° 329 $\sqrt{(1 + 0{,}5 \cdot 0{,}3) : (2 - 0{,}8\overline{3}) + 2{,}\overline{6} + 0{,}\overline{3} + \frac{1}{70}} =$

$= \sqrt{(1 + 0{,}15) : \left(2 - \frac{5}{6}\right) + \frac{8}{3} + \frac{1}{3} + \frac{1}{70}} =$

$= \sqrt{1{,}15 : \left(\frac{12 - 5}{6}\right) + \frac{8}{3} + \frac{1}{3} + \frac{1}{70}} =$

$= \sqrt{\frac{23}{\cancel{20}_{10}} \cdot \frac{\cancel{6}^{3}}{7} + \frac{8}{3} + \frac{1}{3} + \frac{1}{70}} =$

$0{,}8\overline{3} = \frac{83 - 8}{90} = \frac{75}{90} = \frac{5}{6}$

$2{,}\overline{6} = \frac{26 - 2}{9} = \frac{24}{9} = \frac{8}{3}$

$0{,}\overline{3} = \frac{3}{9} = \frac{1}{3}$

$1{,}15 = \frac{115}{100} = \frac{23}{20}$

$= \sqrt{\frac{69}{70} + \frac{8}{3} + \frac{1}{3} + \frac{1}{70}} \overset{①}{=} \sqrt{\frac{69}{70} + \frac{1}{70} + \frac{8}{3} + \frac{1}{3}} = \sqrt{\frac{\cancel{70}^{1}}{\cancel{70}_{1}} + \frac{\cancel{9}^{3}}{\cancel{3}_{1}}} =$

$= \sqrt{1 + 3} = \sqrt{4} = 2$

② $\sqrt{\frac{207 + 560 + 70 + 3}{210}} = \sqrt{\frac{840}{210}} = \sqrt{\frac{\cancel{84}^{12}}{\cancel{21}_{3}}} = \sqrt{\frac{\cancel{12}^{4}}{\cancel{3}_{1}}} = \sqrt{4} = 2$

(:7) (:3)

$1 + \underline{0{,}5 \cdot 0{,}3} = 1 + \frac{5}{10} \cdot \frac{3}{10} = 1 + \frac{15}{100} = 1 + \frac{3}{20} = \frac{20 + 3}{20} = \frac{23}{20}$