

### Číselné výrazy (9.ročník)

$$1. \left(7\frac{4}{21} - 2\frac{6}{7}\right) - \left(9\frac{1}{7} - 8\frac{5}{6}\right) =$$

$$2. 3 \cdot \left(-\frac{3}{5}\right) - \left(-\frac{4}{5} : 2\right) + 5 \left[0,4 - \frac{2}{5} : (-2)\right] + (-2) : (-1) =$$

$$3. \frac{\frac{2}{9} + \frac{4}{3}}{\frac{5}{6} + \frac{1}{4}} =$$

$$4. \frac{1}{3} - \left(\frac{2}{3} - \frac{1}{6}\right) =$$

$$5. \left(\frac{2}{3} : \frac{4}{9}\right) : \frac{7}{6} =$$

$$6. (-3) \cdot 7 \cdot (-2) \cdot (-1) \cdot (-4) =$$

$$7. \frac{-\frac{2}{8}}{-\frac{5}{6}} =$$

$$8. \left[\left(\frac{5}{6} - \frac{3}{4}\right) : \left(\frac{1}{4} - \frac{2}{3}\right)\right] \cdot \frac{\frac{3}{8} - \frac{7}{12}}{\frac{3}{4} - \frac{7}{8}} =$$

$$9. \left[\left(\frac{7}{6} + \frac{6}{7}\right) \cdot \left(\frac{3}{2} - \frac{1}{4}\right)\right] : \left(\frac{11}{8} - \frac{2}{3}\right) =$$

$$10. \frac{\left[\left(-\frac{1}{3}\right) + \frac{1}{6}\right] : \left(-\frac{3}{5}\right)}{\left(-\frac{2}{3}\right)^2 + 0,9 \cdot \frac{2}{3}} =$$

$$11. \frac{\frac{3}{2} - \frac{8}{3}}{\frac{15}{4} - \frac{16}{3}} =$$

$$12. \left(2 \cdot \frac{3}{4} - 2\right) : \left(3\frac{3}{4} + 1,25\right) =$$

$$13. \left||4| \cdot |-8| - (-3)\right| : |2 + |-2|| =$$

$$14. \frac{\frac{3}{4} - \left(-2\frac{3}{4}\right)}{\frac{3}{4} + 2\frac{1}{2}} =$$

$$15. \left[3 - 2\left(\frac{1}{3} - \frac{1}{2}\right)\right] : \left(\frac{1}{3} - \frac{1}{4}\right) =$$

$$16. \frac{\frac{5}{6} - \frac{3}{4} : \frac{1}{4} - \frac{2}{3} \cdot \frac{8}{3} - \frac{7}{12}}{\frac{3}{4} - \frac{7}{8}} =$$

$$17. (-1)^2 \cdot 5 - 42 : 7 + (-3) \cdot (-2) + 22 - (-3)^2 \cdot 2 =$$

$$18. \frac{\frac{9}{4} - \frac{4}{9}}{\frac{2}{3} + \frac{1}{2}} =$$

$$19. -2 \cdot [3^2 - 27 : 3 + (-2)] \cdot (-3)^2 =$$

$$20. \frac{\left(-5\frac{1}{2}\right) \cdot \left(1\frac{7}{11}\right)}{\left(7\frac{2}{3}\right) \cdot \left(-1\frac{4}{23}\right)} =$$

$$21. \left(0,2 - \frac{1}{4}\right) \cdot \left(2\frac{1}{2} + 3\right) - 7 \cdot 0 + \frac{1}{2} =$$

$$22. \frac{\left[\left(-\frac{1}{3}\right) + \frac{1}{6}\right] : \left(-\frac{3}{5}\right) \cdot \frac{47}{(-5)^2}}{\left(-\frac{2}{3}\right)^2 + 0,9 \cdot \frac{2}{3}} =$$

$$23. \left[2,4 - 2 \cdot \left(\frac{3}{10} - 3,21\right) + 0,44 : (-2)\right] : 0,4 =$$

$$24. \frac{\left(-\frac{3}{2}\right)^3 - \left[(-0,75) \cdot \frac{\sqrt{25}}{6} - \frac{3}{\sqrt{4}} \cdot \sqrt{\frac{1}{36}} \cdot 2\right]}{\left[0,7 : (-0,2)^2\right] \cdot \left(-\sqrt{\frac{1}{4}}\right)} =$$

$$25. \frac{-\sqrt{\frac{25}{81}} - \frac{4}{3} \cdot \left(-1\frac{7}{8}\right)}{-6,6 + \left(\frac{5}{2}\right)^2} =$$

$$26. \frac{-5^2 - (-3)^2}{(-4 - 3)^2 - 3 \cdot 5} =$$

$$27. \sqrt{\frac{\frac{3^2}{4} - \left(-\frac{3}{4}\right)^2}{3}} =$$

$$28. \frac{4}{6} : \left(-\frac{1}{2}\right) + 1\frac{1}{3} - (-2)^3 - (-1) \cdot 5 \cdot (-2) + 0,5 =$$

$$29. \frac{\frac{3}{7} - \frac{1}{7} : \sqrt{9}}{2\frac{1}{3} + \frac{7}{6} \cdot (-6)} =$$

$$30. (-1)^2 \cdot 12 - 6 : 3 + (-3) \cdot (-2) + 22 - (-3)^2 \cdot 2 =$$

$$31. 3 \cdot \left[2\frac{1}{2} + \left(-\frac{1}{2}\right)^2\right] - \frac{5}{2} : \frac{15}{12} =$$

$$32. \left(2\frac{1}{3} - 2,5\right) : \frac{5}{6} + \sqrt{(-0,4)^2} =$$

$$33. \frac{\left[\left(-\frac{1}{3}\right) + \frac{1}{6}\right] : \left(-\frac{5}{3}\right) \cdot \frac{8}{(-15)}}{\left(-\frac{2}{3}\right) + \frac{9}{10} \cdot \frac{2}{3}} =$$

$$34. \frac{\frac{4}{33} \cdot \frac{6}{5} - \frac{15}{121} : \frac{3}{11} + \frac{44}{1}}{\frac{2}{6}} =$$

$$35. 17 \cdot 3 - (-\sqrt{2})^2 \cdot \{19,6 + [\sqrt{25} - (6600 : 10^3 - \sqrt{4})]\} =$$

$$36. 8 : \left(-\frac{2}{3}\right) - \left(-\frac{1}{2} : \frac{1}{4}\right) + \left[0,2 - \frac{4}{5} \cdot (-1)\right] =$$

$$37. \sqrt{49} : 64 =$$

$$38. \sqrt{49} : \sqrt{0,64} =$$

$$39. \sqrt{0,49} : \sqrt{64} =$$

$$40. \sqrt{0,49} : \sqrt{0,64} =$$

$$41. -5 + 7[-2,5 + (-3,5 : 7)] =$$

$$42. \frac{\frac{1}{4} - \frac{5}{12} : \frac{5}{6}}{-3 \cdot \left[ \frac{4}{9} - \left( -\frac{2}{3} \right) \right]} =$$

$$43. 16 - (-3)^2 + 3,6 : (-0,4) - \left[ \sqrt{\frac{1}{36}} : \frac{1}{6} - 0,75 \cdot \frac{4}{3} \right] =$$

$$44. \frac{0,25 - 1\frac{1}{3} - \left( -\frac{1}{6} \right)}{2 - 3 \cdot \left( 0,75 - \frac{1}{4} \right)} =$$

$$45. \frac{-5^2 + (-3)^2 - 2^2}{(-3 - 2)^2 + 5 \cdot (-2)^2} =$$

$$46. \frac{(-2)^2 + (-3)^3 - 4^2}{-\frac{3}{8} \cdot \sqrt{16} + 0,5 \cdot (-3)} =$$

$$47. 3 : \left( -\frac{3}{5} \right) - \left( \frac{4}{5} : 2 \right) + 5 \cdot \left[ 0,3 - \frac{2}{5} : (-4) \right] =$$

$$48. \frac{4 + 12 \cdot \frac{3}{4} - (-3)^2}{1,6 : 16 - \sqrt{0,36}} =$$

$$49. \frac{\left( \frac{2}{3} + \frac{3}{4} \right) - \left( \frac{1}{4} + \frac{1}{5} \right)}{\left( \frac{4}{5} + \frac{5}{6} \right) - \left( \frac{2}{5} \right)^2} =$$

$$50. 2^3 - (-2)^2 =$$

$$51. -1[3^2 - (24 \cdot 6) + 7 \cdot (-3)] =$$

$$52. 6 - [(-3) + (-7)] - [-1 - (-5) - (-8)] =$$

$$53. \frac{5 - 3 \cdot \left( 2\frac{1}{3} - 3 \right)}{-\frac{2}{3} - (-2)^2} =$$

$$54. \frac{2\frac{1}{4} - \frac{5}{12} : \frac{5}{6}}{3 \cdot \left[ \frac{4}{9} - \left( -\frac{2}{3} \right) \right]} =$$

$$55. \left[ \left( \frac{2}{5} \right)^2 - 0,2^2 \right] \cdot \left( 2\frac{1}{2} \right)^2 =$$

$$56. \sqrt{0,04} : \frac{1}{5} + (-1)^2 - 4 : 8 =$$

$$57. \frac{(-3)^2 - (-2)^2 - 4^2}{-\frac{3}{7} \cdot (-14) + 0,5 \cdot (-6) \cdot (-4)} =$$

$$58. \frac{6 + 2 \cdot \frac{1}{5} - (24) : (-3)}{-5 - (-2)^2} =$$

$$59. \frac{\left( -\frac{1}{2} + \frac{1}{3} \right) : \left( -2\frac{1}{2} \right)}{\left( -1\frac{1}{2} \right) \cdot 0,8 \cdot \frac{5}{3}} =$$

$$60. 9 : \left( -\frac{3}{5} \right) - \left( -\frac{6}{5} : 3 \right) + 7 \cdot \left( 0,4 - \frac{2}{5} : 4 \right) + (-5) : (-1) =$$

$$61. \frac{3 + \frac{1}{7} \cdot \frac{3}{22} + \frac{2}{5} : \frac{7}{2}}{\frac{2}{15} - \frac{1}{5}} =$$

$$62. 1\frac{1}{2} - 2\frac{3}{4} : \left[ -\frac{2}{3} + \left( -0,2 - \frac{4}{5} \right) \cdot \frac{1}{2} \right] =$$

$$63. \frac{\left( \frac{1}{3} + 4\frac{4}{5} \right) - \left( 3\frac{1}{2} - 3\frac{2}{3} \right)}{\frac{1}{3} - 2\frac{1}{2}} =$$

$$64. \frac{\frac{1}{4} \cdot \sqrt{0,64} - (-2)^2}{3\frac{1}{4} - 2 \cdot \left( -\frac{3}{4} \right)} =$$

$$65. 18 - (-9)^2 + 0,5 : \left( -\frac{1}{5} \right) - \left( \sqrt{\frac{9}{25}} : \frac{6}{5} + 0,6 : \frac{1}{5} \right) =$$

$$66. 4 \cdot \frac{1}{2} + 3 \cdot \sqrt{169} - 2 \cdot 3^2 - 8 : 0,2 - 12^2 =$$

$$67. \frac{\frac{1}{6} - \frac{3}{4}}{\frac{5}{8} - \frac{11}{2}} \cdot \left[ \left( \frac{1}{2} + \frac{5}{6} \right) : \left( \frac{2}{3} - \frac{1}{4} \right) \right] =$$

$$68. \left( \frac{7}{10} - 2\frac{3}{5} \right) - \left( 1\frac{1}{6} - 5\frac{8}{15} \right) =$$

$$69. \frac{\frac{1}{2} + \frac{3}{4}}{2 + \frac{1}{3}} =$$

$$70. 2\frac{1}{3} - \frac{3}{4} : \left( 2 - \frac{5}{6} \right) =$$

$$71. -3 + 8 : (-4) - (-3)^2 - 4 \cdot 2 =$$

$$72. \frac{1}{2} : \left( 1 - \frac{1}{4} \right) \cdot (-6) - (-8) + (-2)^2 =$$

$$73. \frac{\frac{9}{2} + \frac{4}{3}}{\left( -\frac{5}{6} + \frac{3}{12} \right)} =$$

$$74. 10 - \{5 - 3 \cdot [2 - (7 - 10)] + 2\} + 30 =$$

$$75. -[-(3 - 2^2) + 4] + (-8 + 10 : 2) =$$

$$76. \left[ 2\frac{3}{4} : \left( 1\frac{1}{2} - \frac{2}{5} \right) \right] + \left[ \left( \frac{3}{4} + \frac{5}{6} \right) : 3\frac{1}{6} \right] =$$

$$77. 3 \cdot \frac{\sqrt{4}}{2} - \sqrt{\frac{25}{9}} + \frac{4}{\sqrt{4 \cdot 9}} =$$

$$78.$$

$$22 - (-3)^2 \cdot 2 - 42 : 7 + (-3) \cdot (-2) + (-1)^2 \cdot 5$$