

Základní škola Zachar, Kroměříž, příspěvková organizace

Pracovní list

Předmět: Matematika

Ročník: 9

Opakování vzdělávacího celku: Příprava na PZK – počítání se zlomky - řešení

$$1. \left(\frac{1}{2} + 1,5\right) \cdot \left(\frac{5}{2} - \frac{5}{4}\right) - \left(\frac{4}{3} - \frac{5}{6}\right) = \frac{1+3}{2} \cdot \frac{10-5}{4} - \frac{8-5}{6} = \frac{4}{2} \cdot \frac{5}{4} - \frac{3}{6} = \frac{5}{2} - \frac{1}{2} = \frac{4}{2} = \underline{\underline{2}}$$

$$2. \left(\frac{7}{8} - \frac{3}{4}\right) \cdot \left(\frac{13}{16} - \frac{5}{8}\right) \cdot \left(\frac{11}{3} - \frac{17}{6}\right) = \frac{7-6}{8} \cdot \frac{13-10}{16} \cdot \frac{22-17}{6} = \frac{1}{8} \cdot \frac{3}{16} \cdot \frac{5}{6} = \frac{5}{256}$$

3.

$$a) \frac{21}{8} + \frac{19}{8} + \frac{17}{8} = \frac{57}{8} \quad b) \frac{3}{2} + \frac{3}{4} + \frac{3}{8} = \frac{12+6+3}{8} = \frac{21}{8} \quad c) \frac{37}{27} + \frac{37}{9} + \frac{37}{3} = \frac{37+111+333}{27} = \frac{481}{27}$$

4.

$$\left[7 - 8 \cdot \left(\frac{3}{2} - \frac{1}{4}\right)\right] : \left(\frac{17}{4} - \frac{13}{2}\right) = \left[7 - 8 \cdot \frac{6-1}{4}\right] : \left(\frac{17-26}{4}\right) = \\ = \left[7 - 8 \cdot \frac{5}{4}\right] : \left(-\frac{9}{4}\right) = (7-10) : \left(-\frac{9}{4}\right) = (-3) \cdot \left(-\frac{4}{9}\right) = \frac{4}{3}$$

5.

$$9 - \left[14 + \left(\frac{9}{2} - \frac{11}{4}\right)\right] : \left(\frac{35}{4} - \frac{13}{2}\right) = 9 - \left[14 + \frac{18-11}{4}\right] : \frac{35-26}{4} = \\ = 9 - \frac{56+7}{4} : \frac{9}{4} = 9 - \frac{63}{4} : \frac{9}{4} = 9 - 7 = \underline{\underline{2}}$$

$$6. \left[\frac{7}{3} - \frac{4}{7} \cdot \left(\frac{3}{2} - \frac{1}{3}\right)\right] : \left(\frac{7}{3} - \frac{7}{4}\right) = \left[\frac{7}{3} - \frac{4}{7} \cdot \frac{9-2}{6}\right] : \frac{28-21}{12} = \left[\frac{7}{3} - \frac{4}{7} \cdot \frac{7}{6}\right] : \frac{7}{12} = \frac{7}{3} - \frac{4}{6} = \frac{14-4}{6} = \frac{10}{6} = \frac{5}{3}$$

7.

$$\left[15 - \left(6\frac{1}{3} - 1\frac{5}{6}\right) + 1\frac{5}{12}\right] : \left(5 - 3\frac{3}{2}\right) = \left[15 - \frac{38-11}{6} + \frac{17}{12}\right] : \left(\frac{10}{2} - \frac{9}{2}\right) = \\ = \frac{180-54+17}{12} : \frac{1}{2} = \frac{143}{12} : \frac{1}{2} = \frac{143}{6}$$

Vypracovala: P.Trnčíková