



Grade 8 - Mathematics

Focus on Fractions 4

Memo



Calculate the following:

$$\begin{aligned} 1. \left(\frac{3}{4}\right)^2 + 1\frac{1}{2} \times \sqrt{\frac{4}{9}} - \frac{1}{4} \\ &= \frac{9}{16} + \frac{3}{2} \times \frac{2}{3} - \frac{1}{4} \\ &= \frac{9}{16} + 1 - \frac{1}{4} \\ &= 1\frac{9}{16} - \frac{4}{16} \\ &= 1\frac{5}{16} \end{aligned}$$

$$\begin{aligned} 2. 6 - \sqrt{\frac{9}{25}} \div \frac{1}{5} + \left(\frac{3}{5}\right)^2 \times \frac{1}{3} \\ &= 6 - \frac{3}{5} \div \frac{1}{5} + \frac{9}{25} \times \frac{1}{3} \\ &= 6 - \frac{3}{5} \times \frac{5}{1} + \frac{3}{25} \times \frac{1}{1} \\ &= 6 - 3 + \frac{3}{25} \\ &= 3\frac{3}{25} \end{aligned}$$

$$\begin{aligned} 3. \frac{3^2}{\sqrt{25}} \times \frac{1}{3} + 6\frac{1}{2} \div \frac{13}{26} \\ &= \frac{9}{5} \times \frac{1}{3} + \frac{13}{2} \times \frac{26}{13} \\ &= \frac{3}{5} + 13 \\ &= 13\frac{3}{5} \end{aligned}$$



WorksheetCloud

$$\begin{aligned} 4. \quad & \frac{2}{6^2} + \frac{1}{\sqrt{144}} + 3\frac{1}{3} \div 1\frac{3}{5} \\ & = \frac{2}{36} + \frac{1}{12} + \frac{10}{3} \div \frac{8}{5} \\ & = \frac{2}{36} + \frac{1}{12} + \frac{10}{3} \times \frac{5}{8} \\ & = \frac{2}{36} + \frac{1}{12} + \frac{5}{3} \times \frac{5}{4} \\ & = \frac{2}{36} + \frac{1}{12} + \frac{25}{12} \\ & = \frac{2}{36} + \frac{1}{12} + 2\frac{1}{12} \\ & = \frac{2^2}{36} + \frac{3}{12} + \frac{3}{12} \\ & = \frac{2^8}{36} \\ & = \frac{2^2}{9} \end{aligned}$$

$$\begin{aligned} 5. \quad & \left(\frac{3}{5}\right)^2 \div \sqrt{\frac{81}{25}} + 6\frac{1}{3} \times 4\frac{1}{2} \\ & = \frac{9}{25} \div \frac{9}{25} + \frac{61}{3} \times \frac{9}{2} \\ & = 1 + \frac{61}{1} \times \frac{3}{2} \\ & = 1 + \frac{183}{2} \\ & = 1 + 91\frac{1}{2} \\ & = 92\frac{1}{2} \end{aligned}$$