

Problem 10: Compute. Show the steps.

$$\left[ \left( \frac{5}{4} - \frac{5}{12} \right) \times \left( \frac{7}{10} - \frac{8}{15} \right) - \frac{2}{9} \times \frac{1}{8} \right] \times \left( \frac{4}{3} + \frac{7}{6} + 2 \right) =$$

$$\left( \frac{1}{4} - \frac{1}{12} \right) \times \left( \frac{7}{2} - \frac{8}{3} \right)$$

$$\frac{1}{9 \times 4}$$

$$\frac{8+7+12}{6}$$

$$\frac{3-1}{12} \times \frac{21-16}{6}$$

$$\frac{27}{6}$$

$$\frac{2 \times (+5)}{12 \times 6}$$

$$+\frac{10}{12 \times 6}$$

$$+\frac{5}{36} - \frac{1}{36} = \frac{4}{36} = +\frac{1}{9}$$

$$+\frac{1}{9} \times \frac{27}{6} = +\frac{3}{6} = +\frac{1}{2}$$