

$$d) \frac{2}{3} \cdot \frac{4}{5} = \frac{8}{15}$$

$$e) \frac{25}{30} \cdot \frac{45}{50} = \frac{1125}{1500} = \frac{\cancel{3} \cdot \cancel{3} \cdot \cancel{5} \cdot \cancel{5} \cdot \cancel{5}}{2 \cdot 2 \cdot \cancel{3} \cdot \cancel{5} \cdot \cancel{5} \cdot \cancel{5}} = \frac{3}{4}$$

$$\begin{array}{r|l} 1125 & 3 \\ 375 & 3 \\ 125 & 5 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}$$

$$\begin{array}{r|l} 1500 & 2 \\ 750 & 2 \\ 375 & 3 \\ 125 & 5 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}$$

$$8) \left(\frac{25}{30} \cdot \frac{45}{50} \right) - \left(\frac{2}{3} \cdot \frac{4}{5} \right) =$$

$$= \frac{3}{4} - \frac{8}{15} = \frac{3 \cdot 15}{4 \cdot 15} - \frac{8 \cdot 4}{15 \cdot 4} = \frac{45}{60} - \frac{32}{60} =$$

$$= \frac{13}{60}$$

$$\begin{array}{r} 2^2 \\ 4 \overline{) 2} \\ 2 \overline{) 2} \\ 1 \end{array} \quad \begin{array}{r} 3 \cdot 5 \\ 15 \overline{) 3} \\ 5 \overline{) 5} \\ 1 \end{array}$$

$$\text{MCM}(4, 15) = 2^2 \cdot 3 \cdot 5 = 60$$

$$g) \frac{2}{3} : \frac{4}{5} = \frac{2}{3} \cdot \frac{5}{4} = \frac{10}{12} = \frac{5}{6}$$

$$h) \frac{25}{30} : \frac{45}{50} = \frac{25}{30} \cdot \frac{50}{45} = \frac{1250}{1350} = \frac{25}{27}$$

$$i) \left(\frac{25}{30} : \frac{45}{50} \right) - \left(\frac{2}{3} : \frac{4}{5} \right) =$$

$$= \frac{25}{27} - \frac{5}{6} = \frac{25-2}{27-2} = \frac{5 \cdot 9}{6 \cdot 9} = \frac{50}{54} = \frac{45}{54} = \frac{5}{6}$$

$$27 \overline{) 3}$$

$$9 \overline{) 3}$$

$$3 \overline{) 3}$$

$$1 \cdot 3^3$$

$$6 \overline{) 2}$$

$$3 \overline{) 3}$$

$$1 \overline{) 1}$$

$$2 \cdot 3$$

$$MCM(27, 6) = 3^3 \cdot 2 = 54$$