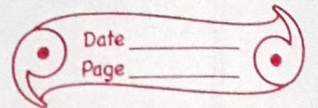


3/9/2021



homework

$$(a) \frac{8}{15} - \frac{4}{9} = \frac{\text{LCM of } 15, 9 = 3 \times 5 \times 3 = 45}$$

$$\frac{8}{15} - \frac{4}{9} = \left(\frac{8 \times 3}{15 \times 3}\right) - \left(\frac{4 \times 5}{9 \times 5}\right) = \frac{24 - 20}{45}$$

$$= \frac{4}{45}$$

$$(b) \frac{11}{13} - \frac{5}{7} = \text{LCM of } 13 \text{ and } 7 = 13 \times 7 = 91$$

$$\frac{11}{13} - \frac{5}{7} = \left(\frac{11 \times 7}{13 \times 7}\right) - \left(\frac{5 \times 13}{7 \times 13}\right) = \frac{77 - 65}{91}$$

$$= \frac{12}{91}$$

$$(c) \frac{13}{17} - \frac{7}{10} \quad \text{LCM of } 17 \text{ and } 10 = 170$$

$$\frac{13}{17} - \frac{7}{10} = \text{LCM of } 17 \text{ and } 10 = 17 \times 10$$

$$= 170$$

$$\frac{13}{17} - \frac{7}{10} = \left(\frac{13 \times 10}{17 \times 10}\right) - \left(\frac{7 \times 17}{10 \times 17}\right) = \frac{130 - 119}{170}$$

$$= \frac{11}{170}$$

(d) $\frac{15}{19} - \frac{9}{13} =$ LCM of 19 and 13 =

$$19 \times 13 = 247$$

$$\frac{15}{19} - \frac{9}{13} = \left(\frac{15 \times 13}{19 \times 13}\right) - \left(\frac{9 \times 19}{13 \times 19}\right) =$$

$$\frac{195 - 171}{247} = \frac{24}{247}$$

e $\frac{7}{9} - \frac{4}{15} =$ LCM of 9 and 15 = $3 \times 3 \times 5$

$$= 45$$

$$\left(\frac{7}{9} - \frac{4}{15}\right) = \left(\frac{7 \times 5}{9 \times 5}\right) - \left(\frac{4 \times 3}{15 \times 3}\right) = \frac{35 - 12}{45}$$

$$\frac{23}{45}$$

$$f \quad \frac{16}{27} - \frac{7}{18} = \frac{16 \times 2}{27 \times 2} - \frac{7 \times 3}{18 \times 3}$$

LCM of 27 and 18
 $= 3 \times 3 \times 3 \times 2 = 54$

$$\frac{16}{27} - \frac{7}{18} = \frac{16 \times 2}{27 \times 2} - \frac{7 \times 3}{18 \times 3}$$

$$\frac{32 - 21}{54} = \frac{11}{54}$$

$$g \quad \frac{7}{9} - \frac{5}{12} = \frac{124}{9} - \frac{101}{12}$$

LCM of 9 and 12 = $3 \times 3 \times 4 = 36$

$$\frac{124}{9} - \frac{101}{12} = \left(\frac{124}{9} \times \frac{4}{4} \right) - \left(\frac{101}{12} \times \frac{3}{3} \right) =$$

$$\frac{496 - 303}{36}$$

$$h \quad 6\frac{3}{17} - 4 = 2\frac{3}{17}$$

$$i \quad 30\frac{3}{4} - 25 = 5\frac{3}{4}$$

$$j \quad 20\frac{7}{12} - 5 = 15\frac{7}{12}$$

$$k \quad 12\frac{7}{8} - 11\frac{1}{2} = 1\frac{3}{8}$$

$$l \quad 100\frac{1}{4} - 99 = 1\frac{1}{4}$$