**“Show that…” – Adding and Subtracting Fractions – Possible Workings**

Look at the “Show that” questions below and fill in a minimum of two working rows.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | Show that $\frac{3}{5}+\frac{1}{4}=\frac{17}{20}$ |  | 2 | Show that $\frac{3}{8}+\frac{5}{12}=\frac{19}{24}$ |
|  | Common denominator: $\frac{12}{20}+\frac{5}{20}$ |  |  | Common denominator: $\frac{36}{96}+\frac{40}{96}$ |
|  | Add: $\frac{17}{20}$ |  |  | Add: $\frac{76}{96}$ |
|  |  |  |  | Simplify: $\frac{19}{24}$ |
|  |  |  |  |  |
| 3 | Show that $\frac{7}{9}-\frac{2}{7}=\frac{31}{63}$ |  | 4 | Show that $\frac{7}{8}+\frac{3}{10}=1\frac{7}{40}$ |
|  | Common denominator: $\frac{49}{63}-\frac{18}{63}$ |  |  | Common denominator: $\frac{70}{80}+\frac{24}{80}$ |
|  | Subtract: $\frac{31}{63}$ |  |  | Add: $\frac{94}{80}$ |
|  |  |  |  | Simplify: $\frac{47}{40}=1\frac{7}{40}$ |
|  |  |  |  |  |
| 5 | Show that $1\frac{1}{6}-\frac{3}{4}=\frac{5}{12}$ |  | 6 | Show that $2\frac{5}{6}-1\frac{8}{9}=\frac{17}{18}$ |
|  | Turn to improper: $\frac{7}{6}-\frac{3}{4}$ |  |  | Turn to improper: $\frac{17}{6}-\frac{17}{9}$ |
|  | Common denominator: $\frac{28}{24}-\frac{18}{24}$ |  |  | Common denominator: $\frac{153}{54}-\frac{102}{54}$ |
|  | Subtract: $\frac{10}{24}=\frac{5}{12}$ |  |  | Subtract: $\frac{51}{54}=\frac{17}{18}$ |
|  |  |  |  |  |
| 7 | Show that $2\frac{1}{4}+1\frac{5}{6}=4\frac{1}{12}$ |  | 8 | Show that $3\frac{3}{8}-1\frac{5}{6}=1\frac{13}{24}$ |
|  | Turn to improper: $\frac{9}{4}+\frac{11}{6}$ |  |  | Turn to improper: $\frac{27}{8}-\frac{11}{6}$ |
|  | Common denominator: $\frac{54}{24}+\frac{44}{24}$ |  |  | Common denominator: $\frac{162}{48}-\frac{88}{48}$ |
|  | Add: $\frac{98}{24}=\frac{49}{12}=4\frac{1}{12}$ |  |  | Subtract: $\frac{74}{48}=\frac{37}{24}=1\frac{13}{24}$ |