

Fractions: Subtracting fractions with different denominators.

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Date:

Name:

Solve each problem below, showing all your working. *Convert to mixed numbers in order to solve.*

[1] $7\frac{4}{5} - 4\frac{1}{9}$	[2] $2\frac{6}{7} - \frac{4}{9}$	[3] $3\frac{4}{6} - 1\frac{4}{9}$
[4] $2\frac{1}{6} - 1\frac{5}{8}$	[5] $5\frac{3}{4} - \frac{2}{5}$	[6] $3\frac{1}{5} - 1\frac{3}{8}$
[7] $2\frac{2}{3} - 1\frac{7}{8}$	[8] $12\frac{3}{4} - 9\frac{5}{7}$	[9] $5\frac{2}{7} - 4\frac{3}{5}$
[10] $2 - 1\frac{2}{9}$	[11] $7\frac{2}{6} - 4\frac{4}{5}$	[12] $3\frac{1}{9} - 2\frac{3}{4}$

ANSWERS

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<p>[1]</p> $7\frac{4}{5} - 4\frac{1}{9}$ <p> $\begin{array}{r} 839 \\ \times 9 \\ \hline 351 \end{array}$ $\begin{array}{r} 327 \\ \times 5 \\ \hline 165 \end{array}$ </p> $\frac{39}{5} - \frac{37}{9} = \frac{166}{45} = 3\frac{31}{45}$ <p> $\begin{array}{r} 45 \\ \times 3 \\ \hline 135 \end{array}$ $\begin{array}{r} 166 \\ - 135 \\ \hline 31 \end{array}$ </p>	<p>[2]</p> $2\frac{6}{7} - \frac{4}{9}$ <p> $\frac{20}{7} - \frac{4}{9} = \frac{180 - 28}{63} = \frac{152}{63} = 2\frac{26}{63}$ </p> <p> $\begin{array}{r} 180 \\ - 28 \\ \hline 152 \end{array}$ </p>	<p>[3]</p> $3\frac{4}{6} - 1\frac{4}{9}$ <p>LCM=18</p> $\frac{22 \times 3}{6 \times 3} - \frac{13 \times 2}{9 \times 2} = \frac{66}{18} - \frac{26}{18} = \frac{40}{18} = 2\frac{4}{18} = 2\frac{2}{9}$
<p>[4]</p> $2\frac{1}{6} - 1\frac{5}{8}$ <p>LCM: 24</p> $\frac{13 \times 4}{6 \times 4} - \frac{13 \times 3}{8 \times 3} = \frac{52}{24} - \frac{39}{24} = \frac{13}{24}$	<p>[5]</p> $5\frac{3}{4} - \frac{2}{5}$ <p>LCM: 20</p> $\frac{23 \times 5}{4 \times 5} - \frac{2 \times 4}{5 \times 4} = \frac{115}{20} - \frac{8}{20} = \frac{107}{20} = 5\frac{7}{20}$	<p>[6]</p> $3\frac{1}{5} - 1\frac{3}{8}$ <p>LCM: 40</p> $\frac{16 \times 8}{5 \times 8} - \frac{11 \times 5}{8 \times 5} = \frac{128}{40} - \frac{55}{40} = \frac{73}{40} = 1\frac{33}{40}$
<p>[7]</p> $2\frac{2}{3} - 1\frac{7}{8}$ <p>LCM: 24</p> $\frac{8 \times 8}{3 \times 8} - \frac{15 \times 3}{8 \times 3} = \frac{64}{24} - \frac{45}{24} = \frac{19}{24}$ <p> $\begin{array}{r} 814 \\ - 45 \\ \hline 19 \end{array}$ </p>	<p>[8]</p> $12\frac{3}{4} - 9\frac{5}{7}$ <p>LCM: 28</p> $\frac{51 \times 7}{4 \times 7} - \frac{68 \times 4}{7 \times 4} = \frac{357}{28} - \frac{272}{28} = \frac{85}{28} = 3\frac{1}{28}$ <p> $\begin{array}{r} 357 \\ - 272 \\ \hline 85 \end{array}$ </p>	<p>[9]</p> $5\frac{2}{7} - 4\frac{3}{5}$ <p>LCM: 35</p> $\frac{37 \times 5}{7 \times 5} - \frac{23 \times 7}{5 \times 7} = \frac{185}{35} - \frac{161}{35} = \frac{24}{35}$ <p> $\begin{array}{r} 185 \\ - 161 \\ \hline 24 \end{array}$ </p>
<p>[10]</p> $2 - 1\frac{2}{9}$ <p>LCM: 9</p> $\frac{2 \times 9}{1 \times 9} - \frac{11 \times 1}{9 \times 1} = \frac{18}{9} - \frac{11}{9} = \frac{7}{9}$	<p>[11]</p> $7\frac{2}{6} - 4\frac{4}{5}$ <p>LCM: 30</p> $\frac{44 \times 5}{6 \times 5} - \frac{24}{5} = \frac{220}{30} - \frac{120}{30} = \frac{100}{30} = 3\frac{10}{30} = 3\frac{1}{3}$ <p> $\begin{array}{r} 224 \\ \times 5 \\ \hline 220 \end{array}$ $\begin{array}{r} 224 \\ \times 5 \\ \hline 120 \end{array}$ </p>	<p>[12]</p> $3\frac{1}{9} - 2\frac{3}{4}$ <p>LCM: 36</p> $\frac{28 \times 4}{9 \times 4} - \frac{11 \times 9}{4 \times 9} = \frac{112}{36} - \frac{99}{36} = \frac{13}{36}$ <p> $\begin{array}{r} 328 \\ \times 4 \\ \hline 1312 \\ - 99 \\ \hline 13 \end{array}$ </p>