

## Operations with Mixed Numbers

<p>Show that <math>1\frac{3}{4} + 2\frac{1}{3} = 4\frac{1}{12}</math></p> <p>Write as improper fractions: <math>\frac{7}{4} + \frac{7}{3}</math></p> <p>Find a common denominator: <math>= \frac{21}{12} + \frac{28}{12}</math></p> <p>Add numerators: <math>= \frac{49}{12}</math></p> <p>Write as mixed number: <math>= 4\frac{1}{12}</math></p>	<p>Show that <math>3\frac{1}{2} - 1\frac{3}{5} = 1\frac{9}{10}</math></p> <p>Write as improper fractions: <math>\frac{7}{2} - \frac{8}{5}</math></p> <p>Find a common denominator: <math>= \frac{35}{10} - \frac{16}{10}</math></p> <p>Subtract numerators: <math>= \frac{19}{10}</math></p> <p>Write as mixed number: <math>= 1\frac{9}{10}</math></p>	<p>Show that <math>3\frac{2}{3} \times 1\frac{1}{6} = 4\frac{5}{18}</math></p> <p>Write as improper fractions: <math>\frac{11}{3} \times \frac{7}{6}</math></p> <p>Multiply numerators and denominators: <math>= \frac{77}{18}</math></p> <p>Simplify and write as mixed number: <math>= 4\frac{5}{18}</math></p>	<p>Show that <math>5\frac{2}{3} \div 1\frac{1}{2} = 4\frac{1}{12}</math></p> <p>Write as improper fractions: <math>\frac{17}{3} \div \frac{3}{2}</math></p> <p>Write as multiplication: <math>= \frac{17}{3} \times \frac{2}{3}</math></p> <p>Multiply numerators and denominators: <math>= \frac{34}{9}</math></p> <p>Simplify and write as mixed number: <math>= 3\frac{7}{9}</math></p>
<p>Show that <math>2\frac{1}{2} + 3\frac{1}{3} = 5\frac{5}{6}</math></p> <p><math>\frac{5}{2} + \frac{10}{3} = \frac{15}{6} + \frac{20}{6}</math></p> <p><math>= \frac{35}{6} = 5\frac{5}{6}</math></p>	<p>Show that <math>4\frac{1}{2} - 2\frac{2}{3} = 1\frac{5}{6}</math></p> <p><math>\frac{9}{2} - \frac{8}{3} = \frac{27}{6} - \frac{16}{6}</math></p> <p><math>= \frac{11}{6} = 1\frac{5}{6}</math></p>	<p>Show that <math>1\frac{3}{4} \times 2\frac{1}{3} = 4\frac{1}{12}</math></p> <p><math>\frac{7}{4} \times \frac{7}{3}</math></p> <p><math>= \frac{49}{12} = 4\frac{1}{12}</math></p>	<p>Show that <math>4\frac{1}{2} \div 2\frac{2}{3} = 1\frac{11}{16}</math></p> <p><math>\frac{9}{2} \div \frac{8}{3} = \frac{9}{2} \times \frac{3}{8}</math></p> <p><math>= \frac{27}{16} = 1\frac{11}{16}</math></p>
<p>Show that <math>5\frac{1}{4} + 1\frac{2}{5} = 6\frac{13}{20}</math></p> <p><math>\frac{21}{4} + \frac{7}{5} = \frac{105}{20} + \frac{28}{20}</math></p> <p><math>= \frac{133}{20} = 6\frac{13}{20}</math></p>	<p>Show that <math>3\frac{4}{5} - 1\frac{2}{3} = 2\frac{2}{15}</math></p> <p><math>\frac{19}{5} - \frac{5}{3} = \frac{57}{15} - \frac{25}{15}</math></p> <p><math>= \frac{32}{15} = 2\frac{2}{15}</math></p>	<p>Show that <math>3\frac{4}{7} \times 2\frac{1}{2} = 8\frac{13}{14}</math></p> <p><math>\frac{25}{7} \times \frac{5}{2}</math></p> <p><math>= \frac{125}{14} = 8\frac{13}{14}</math></p>	<p>Show that <math>5\frac{3}{4} \div 2\frac{1}{5} = 2\frac{27}{44}</math></p> <p><math>\frac{23}{4} \div \frac{11}{5} = \frac{23}{4} \times \frac{5}{11}</math></p> <p><math>= \frac{115}{44} = 2\frac{27}{44}</math></p>
<p>Show that <math>1\frac{2}{3} + 3\frac{5}{7} = 5\frac{8}{21}</math></p> <p><math>\frac{5}{3} + \frac{26}{7} = \frac{35}{21} + \frac{78}{21}</math></p> <p><math>= \frac{113}{21} = 5\frac{8}{21}</math></p>	<p>Show that <math>5\frac{7}{8} - 3\frac{1}{6} = 2\frac{17}{24}</math></p> <p><math>\frac{47}{8} - \frac{19}{6} = \frac{141}{24} - \frac{76}{24}</math></p> <p><math>= \frac{65}{24} = 2\frac{17}{24}</math></p>	<p>Show that <math>5\frac{2}{3} \times 1\frac{7}{8} = 10\frac{5}{8}</math></p> <p><math>\frac{17}{3} \times \frac{15}{8}</math></p> <p><math>= \frac{255}{24} = \frac{85}{8} = 10\frac{5}{8}</math></p>	<p>Show that <math>2\frac{7}{9} \div 3\frac{1}{2} = \frac{50}{63}</math></p> <p><math>\frac{25}{9} \div \frac{7}{2} = \frac{25}{9} \times \frac{2}{7}</math></p> <p><math>= \frac{50}{63}</math></p>