LESSON 31

Division Of Mixed Numbers

Mixed numbers can be divided by changing them into improper fractions, then making a muliplication problem by inverting the fraction that comes after the division sign.

Example: Divide $1\frac{1}{4} \div 2\frac{1}{3}$

$$1\frac{1}{4} \div 2\frac{1}{3}$$

$$\frac{5}{4} \div \frac{7}{3}$$

$$\frac{5}{4} \times \frac{3}{7} = \frac{15}{28}$$

Divide By Multiplying With The Inverse

1. $6 \div 1\frac{1}{3}$ $6 \div \frac{4}{3}$ $\overset{3}{\cancel{6}} \times \frac{3}{\cancel{4}_{2}} = \frac{9}{2} = 4\frac{1}{2}$	6. $10 \div 3\frac{3}{4}$	11. $4\frac{2}{7} \div \frac{1}{14}$
2. $7 \div 1\frac{1}{4}$	7. $9 \div 1\frac{2}{7}$	12. $1\frac{7}{8} \div \frac{3}{8}$
3. $9 \div 3\frac{3}{4}$	8. $5 \div 1\frac{2}{3}$	13. $4\frac{1}{6} \div \frac{10}{3}$
4. $12 \div 2\frac{2}{5}$	9. $42 \div 4\frac{1}{5}$	14. $5\frac{2}{8} \div \frac{7}{8}$
5. $8 \div 1\frac{1}{3}$	10. $60 \div 1\frac{5}{7}$	15. $5\frac{4}{7} \div \frac{13}{49}$

Divide By Multiplying With The Inverse

16. $\frac{3}{8} \div 1\frac{7}{8}$ $\frac{3}{8} \div \frac{15}{8}$ $\frac{\cancel{3}}{\cancel{8}} \times \frac{\cancel{8}}{15_{5}} = \frac{1}{5}$	21. $\frac{9}{32} \div 2\frac{1}{4}$	26. $8\frac{1}{3} \div \frac{5}{9}$
17. $\frac{5}{9} \div 1\frac{1}{9}$	22. $\frac{7}{12} \div 1\frac{1}{6}$	27. $4\frac{1}{8} \div \frac{11}{16}$
18. $\frac{7}{15} \div 1\frac{3}{10}$	23. $\frac{11}{20} \div 2\frac{1}{5}$	28. $7\frac{1}{2} \div \frac{15}{32}$
19. $\frac{5}{16} \div 1\frac{3}{8}$	24. $\frac{9}{14} \div 1\frac{2}{7}$	29. $6\frac{2}{3} \div \frac{10}{27}$
20. $\frac{3}{4} \div 1\frac{5}{16}$	25. $\frac{27}{50} \div 1\frac{4}{5}$	30. $1\frac{3}{10} \div \frac{91}{100}$

Divide By Multiplying With The Inverse

31. $1\frac{3}{4} \div 2\frac{5}{8}$ $\frac{7}{4} \div \frac{21}{8}$ $\frac{\cancel{7}^{1}}{\cancel{4}} \times \frac{\cancel{8}^{2}}{\cancel{21}_{2}} = \frac{2}{3}$	36. $3\frac{1}{7} \div 6\frac{3}{5}$	41. $4\frac{6}{7} \div 1\frac{3}{14}$
32. $8\frac{3}{4} \div 1\frac{7}{8}$	37. $2\frac{2}{11} \div 3\frac{3}{11}$	42. $15\frac{2}{5} \div 9\frac{7}{9}$
33. $1\frac{3}{7} \div 1\frac{1}{14}$	38. $2\frac{4}{7} \div 1\frac{6}{21}$	43. $1\frac{14}{25} \div 5\frac{1}{5}$
34. $5\frac{5}{6} \div 5\frac{5}{8}$	39. $2\frac{1}{12} \div 1\frac{1}{24}$	44. $5\frac{3}{7} \div 8\frac{1}{7}$
35. $1\frac{5}{12} \div 1\frac{8}{9}$	40. $1\frac{5}{20} \div 2\frac{3}{16}$	45. $1\frac{9}{17} \div 1\frac{14}{51}$