LESSON 24

Addition Of Mixed Numbers

The sum of two or more mixed numbers can be found by adding the fractional parts and then adding the whole number parts.

Example 1:

$$\begin{array}{r} 5 \\ +\ \frac{3}{8} \\ \hline 5\ \frac{3}{8} \end{array}$$

Example 2:

$$\begin{array}{r} 7\ \frac{1}{9} \\ +\ 3\ \frac{4}{9} \\ \hline 10\ \frac{5}{9} \end{array}$$

Example 3:

$$\begin{array}{r} 6\ \frac{4}{5} = 6\ \frac{16}{20} \\ +\ 2\ \frac{3}{4} = 2\ \frac{15}{20} \\ \hline 8\ \frac{31}{20} = 9\ \frac{11}{20} \end{array}$$

Since

$$\frac{31}{20} = 1\ \frac{11}{20}$$

$$8 + 1 = 9$$

Add The Mixed Numbers And Give A Reduced Answer

1. $1\frac{2}{5} + \frac{1}{5} = 1\frac{3}{5}$	6. $\frac{6}{10} + 3\frac{1}{10} = 3\frac{7}{10}$	11. $2\frac{3}{7} + 5\frac{1}{7} = 7\frac{4}{7}$	16. $9\frac{2}{10} + 4\frac{7}{10} = 13\frac{9}{10}$	21. $8\frac{5}{9} + 2\frac{4}{9} = 10\frac{9}{9} = 11$	26. $5\frac{3}{4} + 2\frac{3}{4} = 7\frac{6}{4} = 8\frac{1}{2}$
2. $4\frac{3}{7} + \frac{2}{7} = 4\frac{5}{7}$	7. $\frac{4}{12} + 2\frac{1}{12} = 2\frac{5}{12}$	12. $6\frac{1}{8} + 2\frac{5}{8} = 8\frac{6}{8} = 8\frac{3}{4}$	17. $4\frac{7}{25} + 3\frac{9}{25} = 7\frac{16}{25}$	22. $6\frac{3}{15} + 2\frac{2}{15} = 8\frac{5}{15} = 8\frac{1}{3}$	27. $8\frac{4}{5} + 2\frac{3}{5} = 10\frac{7}{5} = 11\frac{2}{5}$
3. $6\frac{3}{8} + \frac{1}{8} = 6\frac{4}{8} = 6\frac{1}{2}$	8. $\frac{3}{9} + 5\frac{1}{9} = 5\frac{4}{9}$	13. $5\frac{1}{11} + 6\frac{3}{11} = 11\frac{4}{11}$	18. $8\frac{17}{50} + 2\frac{3}{50} = 10\frac{20}{50} = 10\frac{2}{5}$	23. $8\frac{3}{7} + 1\frac{4}{7} = 9\frac{7}{7} = 10$	28. $6\frac{5}{9} + 2\frac{7}{9} = 8\frac{12}{9} = 9\frac{1}{3}$
4. $5\frac{3}{10} + \frac{1}{10} = 5\frac{4}{10} = 5\frac{2}{5}$	9. $\frac{1}{15} + 2\frac{3}{15} = 2\frac{4}{15}$	14. $8\frac{1}{16} + 3\frac{15}{16} = 11\frac{16}{16} = 12$	19. $2\frac{3}{100} + 17\frac{46}{100} = 19\frac{49}{100}$	24. $6\frac{5}{16} + 3\frac{11}{16} = 9\frac{16}{16} = 10$	29. $3\frac{15}{16} + 2\frac{5}{16} = 5\frac{20}{16} = 6\frac{1}{4}$
5. $1\frac{5}{12} + \frac{1}{12} = 1\frac{6}{12} = 1\frac{1}{2}$	10. $\frac{5}{12} + 7\frac{2}{12} = 7\frac{7}{12}$	15. $7\frac{1}{32} + 2\frac{3}{32} = 9\frac{4}{32} = 9\frac{1}{8}$	20. $2\frac{3}{4} + 4\frac{1}{4} = 6\frac{4}{4} = 7$	25. $8\frac{5}{7} + 2\frac{9}{7} = 10\frac{14}{7} = 12$	30. $7\frac{9}{10} + 2\frac{3}{10} = 9\frac{12}{10} = 10\frac{1}{5}$

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31. $5\frac{2}{3} = 5\frac{4}{6}$
$+\ \frac{1}{6} = +\ \frac{1}{6}$
$5\frac{5}{6}$

32. $2\frac{3}{5} = 2\frac{6}{10}$
$+\ \frac{1}{10} = +\ \frac{1}{10}$
$2\frac{7}{10}$

33. $8\frac{1}{8} = 8\frac{1}{8}$
$+3\frac{1}{4} = +3\frac{2}{8}$
$11\frac{3}{8}$

34. $6\frac{5}{12} = 6\frac{5}{12}$
$+\ \frac{1}{6} = +\ \frac{2}{12}$
$6\frac{7}{12}$

35. $2\frac{1}{6} = 2\frac{1}{6}$
$+\ \frac{2}{3} = +\ \frac{4}{6}$
$2\frac{5}{6}$

36. $8\frac{3}{4} = 8\frac{9}{12}$
$+\ \frac{1}{12} = +\ \frac{1}{12}$
$8\frac{10}{12} = 8\frac{5}{6}$

37. $5\frac{1}{18} = 5\frac{1}{18}$
$+3\frac{4}{6} = +3\frac{12}{18}$
$8\frac{13}{18}$

38. $6\frac{2}{12} = 6\frac{2}{12}$
$+\ \frac{1}{4} = +\ \frac{3}{12}$
$6\frac{5}{12}$

39. $1\frac{2}{5} = 1\frac{8}{20}$
$+\ \frac{7}{20} = +\ \frac{7}{20}$
$1\frac{15}{20} = 1\frac{3}{4}$

40. $9\frac{3}{4} = 9\frac{9}{12}$
$+\ \frac{1}{6} = +\ \frac{2}{12}$
$9\frac{11}{12}$

41. $6\frac{5}{10} = 6\frac{10}{20}$
$+2\frac{3}{20} = +2\frac{3}{20}$
$8\frac{13}{20}$

42. $8\frac{1}{2} = 8\frac{3}{6}$
$+2\frac{2}{3} = +2\frac{4}{6}$
$10\frac{7}{6} = 11\frac{1}{6}$

43. $5\frac{1}{3} = 5\frac{5}{15}$
$+2\frac{3}{5} = +2\frac{9}{15}$
$7\frac{14}{15}$

44. $6\frac{1}{8} = 6\frac{3}{24}$
$+2\frac{5}{12} = +2\frac{10}{24}$
$8\frac{13}{24}$

45. $3\frac{2}{9} = 3\frac{4}{18}$
$+5\frac{1}{6} = +5\frac{3}{18}$
$8\frac{7}{18}$

Add The Mixed Numbers And Give A Reduced Answer

46.

$$8\ \frac{3}{10} = 8\ \frac{9}{30}$$
$$+\ 2\ \frac{4}{15} = +\ 2\ \frac{8}{30}$$
$$10\ \frac{17}{30}$$

47.

$$6\ \frac{5}{12} = 6\ \frac{15}{36}$$
$$+\ 2\ \frac{1}{18} = +\ 2\ \frac{2}{36}$$
$$8\ \frac{17}{36}$$

48.

$$9\ \frac{3}{20} = 9\ \frac{15}{100}$$
$$+\ 4\ \frac{7}{25} = +\ 4\ \frac{28}{100}$$
$$13\ \frac{43}{100}$$

49.

$$4\ \frac{1}{24} = 4\ \frac{3}{72}$$
$$+\ 7\ \frac{5}{18} = +\ 7\ \frac{20}{72}$$
$$11\ \frac{23}{72}$$

50.

$$8\ \frac{3}{4} = 8\ \frac{9}{12}$$
$$+\ 2\ \frac{3}{12} = +\ 2\ \frac{3}{12}$$
$$10\ \frac{12}{12} = 11$$

51.

$$7\ \frac{8}{10} = 7\ \frac{24}{30}$$
$$+\ 2\ \frac{1}{15} = +\ 2\ \frac{2}{30}$$
$$9\ \frac{26}{30} = 9\ \frac{13}{15}$$

52.

$$2\ \frac{4}{6} = 2\ \frac{4}{6}$$
$$+\ 3\ \frac{1}{3} = +\ 3\ \frac{2}{6}$$
$$5\ \frac{6}{6} = 6$$

53.

$$2\ \frac{5}{15} = 2\ \frac{5}{15}$$
$$+\ 6\ \frac{1}{3} = +\ 6\ \frac{5}{15}$$
$$8\ \frac{10}{15} = 8\ \frac{2}{3}$$

54.

$$8\ \frac{4}{7} = 8\ \frac{8}{14}$$
$$+\ 3\ \frac{6}{14} = +\ 3\ \frac{6}{14}$$
$$11\ \frac{14}{14} = 12$$

55.

$$3\ \frac{12}{25} = 3\ \frac{48}{100}$$
$$+\ 7\ \frac{52}{100} = +\ 7\ \frac{52}{100}$$
$$10\ \frac{100}{100} = 11$$

56.

$$3\ \frac{4}{5} = 3\ \frac{12}{15}$$
$$+\ 2\ \frac{2}{3} = +\ 2\ \frac{10}{15}$$
$$5\ \frac{22}{15} = 6\ \frac{7}{15}$$

57.

$$8\ \frac{5}{6} = 8\ \frac{10}{12}$$
$$+\ 1\ \frac{3}{4} = +\ 1\ \frac{9}{12}$$
$$9\ \frac{19}{12} = 10\ \frac{7}{12}$$

58.

$$7\ \frac{5}{9} = 7\ \frac{10}{18}$$
$$+\ 3\ \frac{5}{6} = +\ 3\ \frac{15}{18}$$
$$10\ \frac{25}{18} = 11\ \frac{7}{18}$$

59.

$$7\ \frac{11}{12} = 7\ \frac{33}{36}$$
$$+\ 3\ \frac{7}{9} = +\ 3\ \frac{28}{36}$$
$$10\ \frac{61}{36} = 11\ \frac{25}{36}$$

60.

$$5\ \frac{25}{26} = 5\ \frac{75}{78}$$
$$+\ 2\ \frac{35}{39} = +\ 2\ \frac{70}{78}$$
$$7\ \frac{145}{78} = 8\ \frac{67}{78}$$