

Name: Key

Date:

Topic:

Class:

Main Ideas/Questions	Notes/Examples	
Adding & Subtracting Fractions	①	Write all mixed numbers as improper fractions.
	②	Find a common denominator by identifying the least common denominator. (LCD)
	③	Rewrite the fractions using the LCD as the denominator. Adjust each numerator to reflect the change in denominator.
	④	Add/Subtract the numerators and keep the common denominator.
	⑤	Simplify (if needed).
Examples	1.	$\frac{1}{10} + \frac{3}{10} = \frac{4}{10} = \frac{2}{5}$
	2.	$\frac{1}{4} + \frac{2}{3} =$ $\frac{3}{12} + \frac{8}{12} = \frac{11}{12}$
	3.	$\frac{3}{10} - \frac{11}{15}$ $\frac{9}{30} - \frac{22}{30} = -\frac{13}{30}$
	4.	$-6 - \frac{1}{4} = -6\frac{1}{4}$
	5.	$\frac{2}{9} - \left(-\frac{5}{18}\right)$ $\frac{2}{9} + \frac{5}{18}$ $\frac{4}{18} + \frac{5}{18} = \frac{9}{18} = \frac{1}{2}$
	6.	$\frac{5}{8} + \left(-\frac{1}{20}\right)$ $\frac{25}{40} + \left(-\frac{2}{40}\right) = \frac{23}{40}$
	7.	$-2\frac{3}{8} - 1\frac{3}{4}$ $-\frac{19}{8} - \frac{7}{4}$ $-\frac{19}{8} - \frac{14}{8} = -\frac{33}{8} = -4\frac{1}{8}$
	8.	$1\frac{5}{6} + 2\frac{3}{4}$ $\frac{11}{6} + \frac{11}{4}$ $\frac{22}{12} + \frac{33}{12} = \frac{55}{12} = 4\frac{7}{12}$

$$9. 2\frac{4}{5} - \left(-2\frac{1}{4}\right)$$

$$\frac{14}{5} + \frac{9}{4}$$

$$\frac{56}{20} + \frac{45}{20} = \frac{101}{20} = 5\frac{1}{20}$$

$$10. 1\frac{7}{16} - 1\frac{1}{6}$$

$$\frac{23}{16} - \frac{7 \times 8}{6^8}$$

$$\frac{69}{48} - \frac{56}{48} = \frac{13}{48}$$

$$11. -\frac{5}{6} + 1\frac{2}{9}$$

$$-\frac{5}{6} + \frac{11}{9}$$

$$-\frac{15}{18} + \frac{22}{18} = \frac{7}{18}$$

$$12. -3\frac{1}{4} + \left(-\frac{1}{2}\right)$$

$$-\frac{13}{4} + \left(-\frac{1}{2}\right)$$

$$-\frac{13}{4} + \left(-\frac{2}{4}\right) = -\frac{15}{4} = -3\frac{3}{4}$$

Applications

13. The length of a board is $2\frac{5}{8}$ feet long. If $\frac{5}{6}$ of a foot is trimmed off, find the new length.

$$2\frac{5}{8} - \frac{5}{6}$$

$$\frac{21}{8} - \frac{5}{6}$$

$$\frac{63}{24} - \frac{20}{24} = \frac{43}{24} = 1\frac{19}{24} \text{ ft.}$$

14. During a recent two-day snowstorm, it snowed $6\frac{1}{8}$ inches on the first day and $8\frac{5}{12}$ inches on the second day. Find the total snowfall.

$$6\frac{1}{8} + 8\frac{5}{12}$$

$$6\frac{3}{24} + 8\frac{10}{24} = 14\frac{13}{24} \text{ in.}$$

15. Natalie is baking a cake and cookies for her daughter's class party. She needs $1\frac{2}{3}$ cups of milk for the cake and $\frac{1}{2}$ cup for the cookies. If she has 3 cups of milk total, how much will she have left?

$$1\frac{2}{3} + \frac{1}{2}$$

$$\frac{5}{3} + \frac{1}{2} = \frac{13}{6}$$

$$3 - \frac{13}{6}$$

$$\frac{18}{6} - \frac{13}{6} = \frac{5}{6} \text{ cups.}$$

Summary: _____
