

Name: _____

Period: _____ Date: _____

Mixed Fractions Answers

Section I. Use the LCM to compare and add/subtract fractions.

Determine the LCM	Compare the Fractions	Add/Subtract Leave in proper format
1a. 4 and 16 16	1b. $\frac{3}{4} > \frac{11}{16}$	1c. $\frac{3}{4} - \frac{11}{16} = \frac{1}{16}$
2a. 7 and 5 35	2b. $\frac{4}{7} > \frac{2}{5}$	2c. $\frac{4}{7} - \frac{2}{5} = \frac{6}{35}$
3a. 9 and 6 18	3b. $\frac{5}{9} < \frac{4}{6}$	3c. $\frac{5}{9} + \frac{4}{6} = \frac{22}{18} = \frac{11}{9}$
4a. 8 and 10 40	4b. $\frac{5}{8} < \frac{7}{10}$	4c. $\frac{5}{8} - \frac{7}{10} = \frac{-3}{40}$

Section II. Use the GCF to reduce fractions.

Determine the GCF by Prime Factoring	Reduce the Fraction
5. 20 and 70 $20 = 2 \cdot 2 \cdot 5$ $70 = 2 \cdot 5 \cdot 7$ GCF = $2 \cdot 5 = 10$	$\frac{20}{70} = \frac{2 \cdot 2 \cdot 5}{2 \cdot 5 \cdot 7} = \frac{2}{7}$
6. 36 and 90 $36 = 2 \cdot 2 \cdot 3 \cdot 3$ $90 = 2 \cdot 3 \cdot 3 \cdot 5$ GCF = $2 \cdot 3 \cdot 3 = 18$	$\frac{36}{90} = \frac{2 \cdot 2 \cdot 3 \cdot 3}{2 \cdot 3 \cdot 3 \cdot 5} = \frac{2}{5}$
7. 100 and 175 $100 = 2 \cdot 2 \cdot 5 \cdot 5$ $175 = 5 \cdot 5 \cdot 7$ GCF = $5 \cdot 5 = 25$	$\frac{100}{175} = \frac{2 \cdot 2 \cdot 5 \cdot 5}{5 \cdot 5 \cdot 7} = \frac{4}{7}$
8. 135 and 108 $135 = 3 \cdot 3 \cdot 3 \cdot 5$ $108 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3$ GCF = $3 \cdot 3 \cdot 3 = 27$	$\frac{108}{135} = \frac{3 \cdot 3 \cdot 3 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3} = \frac{5}{2 \cdot 2} = \frac{5}{4}$

Section III. Perform the indicated operation. Leave answers in reduced form.

9. $\frac{1}{3} + \frac{4}{15} = \frac{9}{15} = \frac{3}{5}$

10. $\frac{9}{10} - \frac{3}{4} = \frac{3}{20}$

11. $\frac{8}{9} \cdot \frac{15}{16} = \frac{5}{6}$

12. $\frac{6}{11} \div \frac{5}{12} = \frac{72}{55}$

13. $\frac{3}{8} + \frac{2}{5} = \frac{31}{40}$

14. $\frac{5}{6} - \frac{5}{8} = \frac{5}{24}$

15. $\frac{4}{5} \div \frac{8}{15} = \frac{3}{2}$

16. $\frac{1}{3} \cdot \frac{4}{15} = \frac{4}{45}$

17. $4\frac{5}{7} - 3\frac{1}{2} = \frac{17}{14} = 1\frac{3}{14}$

18. $4\frac{3}{8} - \frac{7}{10} = \frac{147}{40} = 3\frac{27}{40}$

19. $\frac{4}{9} \cdot \frac{-3}{16} = -\frac{1}{12}$

20. $-3\frac{5}{9} \div (-8) = \frac{4}{9}$

For questions 21 & 22, please leave your answer in [Proper Form](#)

21. Before soccer practice, your water bottle is $\frac{7}{8}$ full. After practice it is $\frac{2}{5}$ full. How much water did you drink during practice?

$$\frac{7}{8} - \frac{2}{5} = \frac{19}{40}$$

22. A carpenter used 24 boards each measuring $3\frac{3}{4}$ inches long. How many feet long is the porch the carpenter built?

$$24 \cdot 3\frac{3}{4} = 90 \text{ ft long}$$

23. If a fraction is multiplied by its reciprocal. What will the answer be? Please give an example to prove your answer.

The answer will always equal one $\frac{3}{10} \cdot \frac{10}{3} = \frac{30}{30} = 1$