

Math 8 Honors 2025
HW Ch2B Composite Fractions

Name _____

Date _____

1. Express as a mixed fraction:
$$\frac{\left(\frac{2}{3} + \frac{-4}{5}\right)}{-\frac{3}{4}}$$

2. Express as a common fraction:
$$\frac{\frac{3}{5} - \frac{1}{4}}{\frac{5}{8}}$$

3. Express as a mixed fraction:
$$\frac{2 \cdot 1\frac{1}{4}}{2 - \frac{4 - \frac{7}{8}}{4 - \frac{1}{4}}}$$

4. Express in simplest form:
$$\left(\frac{\frac{2}{3} \div \frac{3}{4}}{1\frac{5}{6}}\right) \left(\frac{2\frac{1}{5} \times 3}{3\frac{1}{5}}\right)$$

5. Write as a mixed number:
$$\frac{\frac{2}{3} - \frac{1}{4}}{\frac{3}{5} - \frac{1}{2}}$$

6. Express in simplest form:
$$\frac{\frac{4}{9} + \frac{1}{6}}{\frac{2}{3} \left(\frac{5}{6} - \frac{3}{4}\right)}$$

7. Simplify and write your answer as a common fraction:

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

8. Simplify the expression:
$$\frac{\frac{3}{8}}{1 + \frac{1}{\frac{2}{3} \div \frac{5}{6}}}$$

Express your answer as a common fraction.

9. Express as a common fraction:
$$\frac{\frac{1}{2} + \frac{1}{5}}{\frac{1}{3} + \frac{1}{4}}$$

10. Simplify:
$$\frac{\frac{1}{2} + \frac{1}{3} + \frac{1}{4}}{\frac{1}{2} \cdot \frac{1}{3} \cdot \frac{1}{4}}$$

11. Express in simplest form: $\frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{2} - \frac{1}{3}}$

12. Express as a common fraction: $\frac{1}{\frac{1}{2} + \frac{1}{3} + \frac{1}{4}}$

13. Express as a common fraction: $\frac{1 - \frac{1}{4}}{1 + \frac{1}{4}}$

14. Simplify: $\frac{1}{1 - \frac{1}{1 - \frac{1}{2}}}$

15. Express the following as a simple, reduced, rational number. $\frac{1}{2 - \frac{1}{1 + \frac{2}{1 + \frac{1}{2}}}}$

16. Express as a fraction in simplest form:

$$6 - \frac{5}{4 - \frac{1}{3 - \frac{1}{2 - 1}}}$$

17. Express as a common fraction: $1 - \frac{1}{1 - \frac{1}{1 - \frac{3}{8}}}$

18. Express as a common fraction: $3 + \frac{3}{3 + \frac{1}{3}}$

19. Calculate: $\frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{2} + \frac{1}{3}}$. Express your answer as a common fraction.

20. Calculate: $\frac{\frac{3}{4} + (\frac{5}{6} \div \frac{2}{3})}{\frac{3}{4} - (\frac{5}{6} \div \frac{2}{3})}$.

21. Simplify the expression: $\frac{6}{5 + \frac{4}{3 + \frac{1}{2}}}$

22. Express as a mixed number: $1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{3}}}$

23. Find the value of the complex fraction given.
Express your answer as a common fraction.

$$\frac{1}{4 - \frac{1}{1 - \frac{1}{4}}}$$

25. Compute the value of the following expression.
Express your answer as a common fraction.

$$\frac{1}{1 - \frac{1}{1+1}} + \frac{1}{1 + \frac{1}{1+1}}$$

27. Simplify and give your answer as a mixed number:

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

29. Write as a common fraction:

$$\frac{1}{1 + \frac{1}{1 + \frac{1}{1 + 1}}}$$

24. Write the following as a common fraction.

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

26. Simplify and express your answer as a common fraction.

$$\frac{1}{1 + \frac{1}{\frac{1}{1+1} + \frac{1}{1+1}}}$$

28. Simplify and express your answer as a common fraction.

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

30. Simplify and express your answer as a common fraction.

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

Answer List

1. $\frac{8}{45}$	2. $\frac{14}{25}$	3. $2\frac{1}{7}$
4. 1	5. $4\frac{1}{6}$	6. 11
7. $\frac{1}{3}$	8. $\frac{1}{6}$	9. $\frac{6}{5}$
10. 26	11. 5	12. $\frac{12}{13}$
13. $\frac{3}{5}$	14. -1	15. $\frac{7}{11}$
16. $\frac{32}{7}$	17. $\frac{8}{3}$	18. $\frac{39}{10}$
19. $\frac{9}{5}$	20. -4	21. $\frac{42}{43}$
22. $1\frac{4}{7}$	23. $\frac{3}{8}$	24. $\frac{4}{9}$
25. $\frac{8}{3}$	26. $\frac{1}{2}$	27. $1\frac{7}{8}$
28. $\frac{5}{9}$	29. $\frac{3}{5}$	30. $\frac{46}{35}$

Catalog List

1. MCC AA 11	2. MCC AA 64	3. MCC AA 18
4. MCC AA 32	5. MCC AA 41	6. MCC AA 57
7. MCC AA 36	8. MCC AA 45	9. MCC AA 81
10. MCC AA 82	11. MCC AA 79	12. MCC AA 77
13. MCC AA 52	14. MCC AA 70	15. MCC AA 71
16. MCC AA 72	17. MCC AA 84	18. MCC AA 97
19. MCC AA 121	20. MCC AA 125	21. MCC AA 17
22. MCC AA 49	23. MCC AA 76	24. MCC AA 111
25. MCC AA 115	26. MCC AA 116	27. MCC AA 73
28. MCC AA 117	29. MCC AA 107	30. MCC AA 120