3.3 Exercises

Add the following fractions. Simplify all answers. See Examples 1–3.

1. $\dfrac{3}{4} + \dfrac{1}{8}$

2. $\dfrac{1}{6} + \dfrac{2}{3}$

3. $\dfrac{2}{3} + \dfrac{2}{9}$

4. $\dfrac{3}{7} + \dfrac{1}{14}$

5. $\dfrac{9}{20} + \dfrac{3}{10}$

6. $\dfrac{5}{8} + \dfrac{1}{4}$

7. $\dfrac{3}{5} + \dfrac{3}{8}$

8. $\dfrac{5}{7} + \dfrac{3}{14}$

9. $\dfrac{2}{9} + \dfrac{5}{12}$

10. $\dfrac{5}{8} + \dfrac{1}{12}$

11. $\dfrac{1}{3} + \dfrac{3}{5}$

12. $\dfrac{2}{5} + \dfrac{3}{7}$

13. $\dfrac{1}{4} + \dfrac{2}{9} + \dfrac{1}{3}$

14. $\dfrac{3}{7} + \dfrac{2}{5} + \dfrac{1}{10}$

15. $\dfrac{3}{10} + \dfrac{2}{5} + \dfrac{3}{20}$

16. $\dfrac{1}{3} + \dfrac{3}{8} + \dfrac{1}{4}$

17. $\dfrac{4}{15} + \dfrac{1}{6} + \dfrac{1}{3}$

18. $\dfrac{5}{12} + \dfrac{2}{9} + \dfrac{1}{6}$

19. $\begin{array}{r} \dfrac{1}{4} \\ + \dfrac{1}{8} \\ \hline \end{array}$

20. $\begin{array}{r} \dfrac{7}{12} \\ + \dfrac{1}{8} \\ \hline \end{array}$

21. $\begin{array}{r} \dfrac{5}{12} \\ + \dfrac{1}{16} \\ \hline \end{array}$

22. $\begin{array}{r} \dfrac{3}{7} \\ + \dfrac{1}{3} \\ \hline \end{array}$

Subtract the following fractions. Simplify all answers. See Example 4.

23. $\dfrac{5}{6} - \dfrac{1}{3}$

24. $\dfrac{3}{4} - \dfrac{5}{8}$

25. $\dfrac{2}{3} - \dfrac{1}{6}$

26. $\dfrac{3}{4} - \dfrac{5}{8}$

27. $\dfrac{2}{3} - \dfrac{1}{5}$

28. $\dfrac{5}{6} - \dfrac{7}{9}$

29. $\dfrac{5}{12} - \dfrac{1}{4}$

30. $\dfrac{5}{7} - \dfrac{1}{3}$

31. $\dfrac{8}{9} - \dfrac{7}{15}$

32. $\begin{array}{r} \dfrac{4}{5} \\ -\dfrac{1}{3} \\ \hline \end{array}$

33. $\begin{array}{r} \dfrac{7}{8} \\ -\dfrac{4}{5} \\ \hline \end{array}$

34. $\begin{array}{r} \dfrac{5}{8} \\ -\dfrac{1}{3} \\ \hline \end{array}$

35. $\begin{array}{r} \dfrac{5}{12} \\ -\dfrac{1}{16} \\ \hline \end{array}$

36. $\begin{array}{r} \dfrac{7}{12} \\ -\dfrac{1}{3} \\ \hline \end{array}$

Solve each application problem.

4-Piece Chisel Set   LOT NO. 42429
- sizes: $\frac{1}{4}$", $\frac{1}{2}$, $\frac{3}{4}$, and 1"
- Heat-treated, high-carbon steel
- $7\frac{1}{4}$" overall length
- Straight bevel

SALE!
$4⁹⁷   REGULAR PRICE $7.99

Use the newspaper advertisement for this 4-piece chisel set to answer Exercises 37–38. (*Source:* Harbor Freight Tools.)

37. Find the difference in the cutting-edge width of the two chisels with the widest blades. The symbol " is for inches.

38. Find the difference in the cutting-edge width of the two chisels with the narrowest blades. The symbol " is for inches.