Additional Exercises 0.1

Simplify.

1. \( \frac{28}{63} \)
2. \( \frac{17}{31} \)
3. \( \frac{18}{30} \)
4. \( \frac{20}{25} \)

Write as a mixed number.

5. \( \frac{56}{7} \)
6. \( \frac{17}{11} \)
7. \( \frac{55}{4} \)
8. \( \frac{31}{5} \)

Change to an improper fraction.

9. \( 3 \frac{7}{12} \)
10. \( 5 \frac{6}{7} \)
11. \( 6 \frac{5}{9} \)
12. \( 5 \frac{4}{9} \)

Find the missing numerator.

13. \( \frac{5}{7} = \frac{?}{14} \)
14. \( \frac{7}{11} = \frac{?}{55} \)
15. \( \frac{14}{3} = \frac{?}{9} \)
16. \( \frac{6}{7} = \frac{?}{21} \)

17. There are 5280 feet in a mile. What fraction of a mile is represented by 660 feet?

18. There are 100 centimeters in 1 meter. What fraction of a meter is 35 centimeters?

19. There are 1950 students in a school district and 30 are in Mrs. Johnson’s class. What fraction of all the students is represented by Mrs. Johnson’s class?

20. Bobby owes $275 in bills. He has $425 in the bank. What fraction of his bank account is owed in bills?
Additional Exercises 0.2

Perform the indicated operations. Simplify your answers.

1. \( \frac{2}{9} + \frac{4}{9} + \frac{1}{9} \)
2. \( \frac{1}{3} + \frac{1}{9} \)
3. \( \frac{1}{5} + \frac{3}{14} \)
4. \( \frac{7}{9} - \frac{1}{9} \)
5. \( \frac{1}{7} - \frac{1}{11} \)
6. \( \frac{8}{5} + \frac{3}{10} + \frac{11}{3} \)
7. \( 4\frac{1}{3} + \frac{6}{8} \)
8. \( 15\frac{1}{5} - 7\frac{3}{5} \)
9. \( \frac{38}{3} - \frac{25}{16} \)
10. \( \frac{24}{26} + \frac{48}{26} + \frac{6}{26} \)
11. \( \frac{5}{8} + \frac{2}{3} \)
12. \( \frac{3}{5} - \frac{1}{4} + \frac{2}{7} \)
13. \( 4\frac{3}{5} - \frac{1}{20} \)
14. \( \frac{9}{20} - \frac{8}{15} + \frac{3}{10} \)
15. \( \frac{8}{3} + \frac{1}{4} - \frac{1}{4} \)
16. \( 17\frac{1}{4} + \frac{3}{8} \)
17. \( 18\frac{2}{7} - 4\frac{5}{14} \)

18. The total length of a motorcycle race is \( \frac{7}{8} \) of a mile. Rilee has completed \( \frac{3}{8} \) of a mile. How much does she have left to complete?

19. Austin walked \( \frac{3}{26} \) mile to his biology class, \( \frac{3}{26} \) mile to his art class, \( \frac{6}{26} \) of a mile to his calculus class, and back to his dormitory. If he walked 1 mile altogether, how far did he walk from his calculus class to his dormitory?

20. Payton read \( \frac{7}{20} \) of her book on Monday, \( \frac{3}{20} \) of her book on Tuesday, and \( \frac{1}{2} \) of her book on Wednesday. What part of her book has she read?
Additional Exercises 0.3

Perform the indicated operations. Simplify your answers.

1. \( \frac{1}{7} \times \frac{1}{3} \)
2. \( \frac{10}{4} \times \frac{3}{25} \)
3. \( \frac{6}{7} \times 7 \)
4. \( \frac{2}{4} \times \frac{3}{4} \)
5. \( \frac{6}{8} + \frac{7}{16} \)
6. \( \frac{5}{9} + 5 \)
7. \( \frac{4}{7} + \frac{1}{5} \)
8. \( \frac{7}{8} + \frac{1}{5} \)
9. \( \frac{3}{5} + 12 \)
10. \( \frac{9}{6} \times \frac{8}{19} \)
11. \( 7 \times \frac{4}{3} \)
12. \( 8 \times 9 \frac{11}{20} \)
13. \( \frac{1}{4} \times \frac{1}{7} \times \frac{4}{5} \)
14. \( \frac{20}{8} + 10 \)
15. \( 15 \div \frac{60}{5} \)
16. \( \frac{2}{9} + \frac{4}{3} \)
17. \( \frac{3}{7} + \frac{1}{7} \)
18. \( 6 + \frac{2}{5} \)

19. Mary is saving \( \frac{3}{22} \) of her monthly income of $9570 for retirement. How much money is she setting aside each month for retirement?

20. How many \( \frac{4}{15} \) pound boxes of cereal can be made from 9960 pounds of cereal?