

Do NOT use a calculator on these problems.

Write each of the following as an equivalent fraction.

1.  $\frac{5}{12} = \frac{40}{?}$

1. \_\_\_\_\_

2.  $\frac{7}{15} = \frac{?}{90}$

2. \_\_\_\_\_

3.  $\frac{6}{7} = \frac{?}{84}$

3. \_\_\_\_\_

4.  $\frac{11}{13} = \frac{55}{?}$

4. \_\_\_\_\_

Use > or < to make a true statement.

5.  $\frac{3}{5} \text{ — } \frac{6}{11}$

5. \_\_\_\_\_

6.  $\frac{1}{2} \text{ — } \frac{8}{15}$

6. \_\_\_\_\_

7.  $\frac{15}{23} \text{ — } \frac{14}{25}$

7. \_\_\_\_\_

8.  $\frac{3}{8} \text{ — } \frac{3}{7}$

8. \_\_\_\_\_

Simplify.

9.  $-\frac{425}{525}$

9. \_\_\_\_\_

10.  $\frac{152}{176}$

10. \_\_\_\_\_

11.  $-\frac{54}{63}$

11. \_\_\_\_\_

12.  $\frac{14}{84}$

12. \_\_\_\_\_

Write the following mixed numbers as improper fractions.

13.  $-5\frac{3}{7}$

13. \_\_\_\_\_

14.  $-15\frac{4}{9}$

14. \_\_\_\_\_

15.  $1\frac{9}{10}$

15. \_\_\_\_\_

16.  $4\frac{5}{8}$

16. \_\_\_\_\_

**Simplify.**

17.  $\frac{3}{4} - \frac{7}{8}$

17. \_\_\_\_\_

18.  $-\frac{2}{9} + \frac{11}{27}$

18. \_\_\_\_\_

19.  $-\frac{2}{5} \cdot \frac{15}{24}$

19. \_\_\_\_\_

20.  $\frac{1}{5} - \frac{3}{10} - \frac{4}{15}$

20. \_\_\_\_\_

21.  $\frac{-5}{24} \div \frac{15}{64}$

21. \_\_\_\_\_

22.  $\frac{-9}{13} - \frac{4}{13}$

22. \_\_\_\_\_

23.  $\frac{11}{16} + \frac{5}{16}$

23. \_\_\_\_\_

24.  $\frac{1}{2} + \frac{4}{15} \cdot \frac{10}{16}$

24. \_\_\_\_\_

25.  $\left(\frac{1}{4}\right)^3$

25. \_\_\_\_\_

26.  $\left(\frac{-2}{7}\right)^2$

26. \_\_\_\_\_

**Simplify.**

27.  $12 - 4\frac{2}{9}$

27. \_\_\_\_\_

28.  $6\frac{2}{5} + 7\frac{3}{5}$

28. \_\_\_\_\_

**Evaluate the following.**

29.  $x + yz$ , for  $x = \frac{1}{3}$ ,  $y = \frac{1}{3}$  and  $z = 5$

29. \_\_\_\_\_

30.  $3x^2 + y$ , for  $x = \frac{5}{6}$  and  $y = -\frac{2}{3}$

30. \_\_\_\_\_

**Solve each equation.**

31.  $\frac{3}{5}x = 15$

31. \_\_\_\_\_

32.  $\frac{x}{6} = 2$

32. \_\_\_\_\_

33.  $a + \frac{3}{7} = \frac{5}{14}$

33. \_\_\_\_\_

34.  $n - \frac{3}{4} = \frac{7}{12}$

34. \_\_\_\_\_

**Find each of the following.**

35. Perimeter for a rectangle with a length of  $4\frac{1}{2}$  inches and a width of 7 inches.

35. \_\_\_\_\_

36. Area of a rectangle with a length of  $4\frac{1}{2}$  inches and a width of 7 inches.

36. \_\_\_\_\_

Answer Key Chapters 2S, 3S, 4 Pencil Practice Test

- |     |                  |     |                                     |
|-----|------------------|-----|-------------------------------------|
| 1.  | 96               | 25. | $\frac{1}{64}$                      |
| 2.  | 42               | 26. | $\frac{4}{49}$                      |
| 3.  | 72               | 27. | $7\frac{7}{9}$                      |
| 4.  | 65               | 28. | 14                                  |
| 5.  | >                | 29. | 2                                   |
| 6.  | <                | 30. | $\frac{17}{12}$ or $1\frac{5}{12}$  |
| 7.  | >                | 31. | $x = 25$                            |
| 8.  | <                | 32. | $x = 12$                            |
|     |                  | 33. | $a = -\frac{1}{14}$                 |
| 9.  | $-\frac{17}{21}$ | 34. | $n = 1\frac{1}{3}$ or $\frac{4}{3}$ |
| 10. | $\frac{19}{22}$  | 35. | 23 inches                           |
| 11. | $-\frac{6}{7}$   | 36. | $31\frac{1}{2}$ square inches       |
| 12. | $\frac{1}{6}$    |     |                                     |
| 13. | $-\frac{38}{7}$  |     |                                     |
| 14. | $-\frac{139}{9}$ |     |                                     |
| 15. | $\frac{19}{10}$  |     |                                     |
| 16. | $\frac{37}{8}$   |     |                                     |
| 17. | $-\frac{1}{8}$   |     |                                     |
| 18. | $\frac{5}{27}$   |     |                                     |
| 19. | $-\frac{1}{4}$   |     |                                     |
| 20. | $-\frac{11}{30}$ |     |                                     |
| 21. | $-\frac{8}{9}$   |     |                                     |
| 22. | -1               |     |                                     |
| 23. | 1                |     |                                     |
| 24. | $\frac{2}{3}$    |     |                                     |