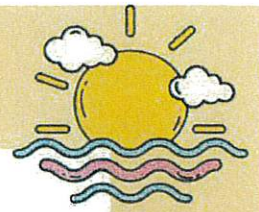


# Entering 7th Grade Summer Math Maintenance



Dear Parents,

Summer is nearly here - hooray! While we look forward to a summer of rest and relaxation, we want to ensure that our students do enough math review and practice to keep their skills sharp for the fall! The purpose of this packet is to make sure you have options that will work for you and your child(ren). Teachers will test students at the beginning of the school year on the topics listed under "Required Skills." Furthermore, although teachers will not be collecting math work from students in the fall, students are encouraged to keep up their arithmetic skills, review math concepts, and continue to explore other topics they are interested in. Intentionally incorporating math into daily activities will promote student success in the new school year. Have a wonderful summer!

## Required Skills: (WILL BE TESTED IN THE FALL)

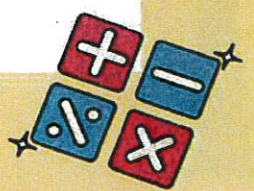
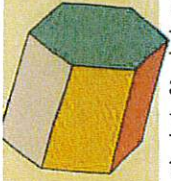
It is expected that students are proficient with 0-12 multiplication facts. Multiplication is *fundamental* to more advanced work in math. Furthermore, students will be expected to complete computations with negative numbers (all operations with integers). 5-10 minutes of practice per day can make a big difference. A variety of practice options are provided in this list.

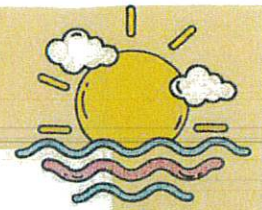
## Skills to review before 7th grade:

- Multiplication facts 0-12
- Operations with integers, decimals, and fractions
- Rounding
- Comparing using inequality signs
- Order of operations
- Solving one-step equations
- Multiply/divide by powers of ten
- Exponents and square roots
- Converting between decimals, fractions, and percents
- Percentage Applications
- Perimeter and Circumference
- Area (square, rectangle, triangle, parallelogram, circle)
- Graphing on the coordinate plane

## Tech Free Resources:

- Students will receive a hard copy math packet from their current math teacher with an answer key. Students are strongly encouraged to complete it.
- Math review workbooks. Some options below:
  - Spectrum Math - Grade 6 (ISBN 978-0769636962)
  - Spectrum enrichment Math - Grade 6 (ISBN 978-0769659169)
  - Summer Skills - Summer Math Sharpener 6th Grade (<https://www.summerskills.com>)



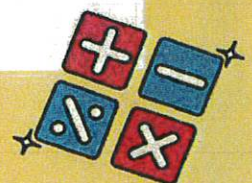
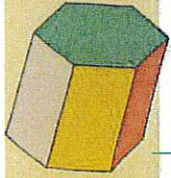


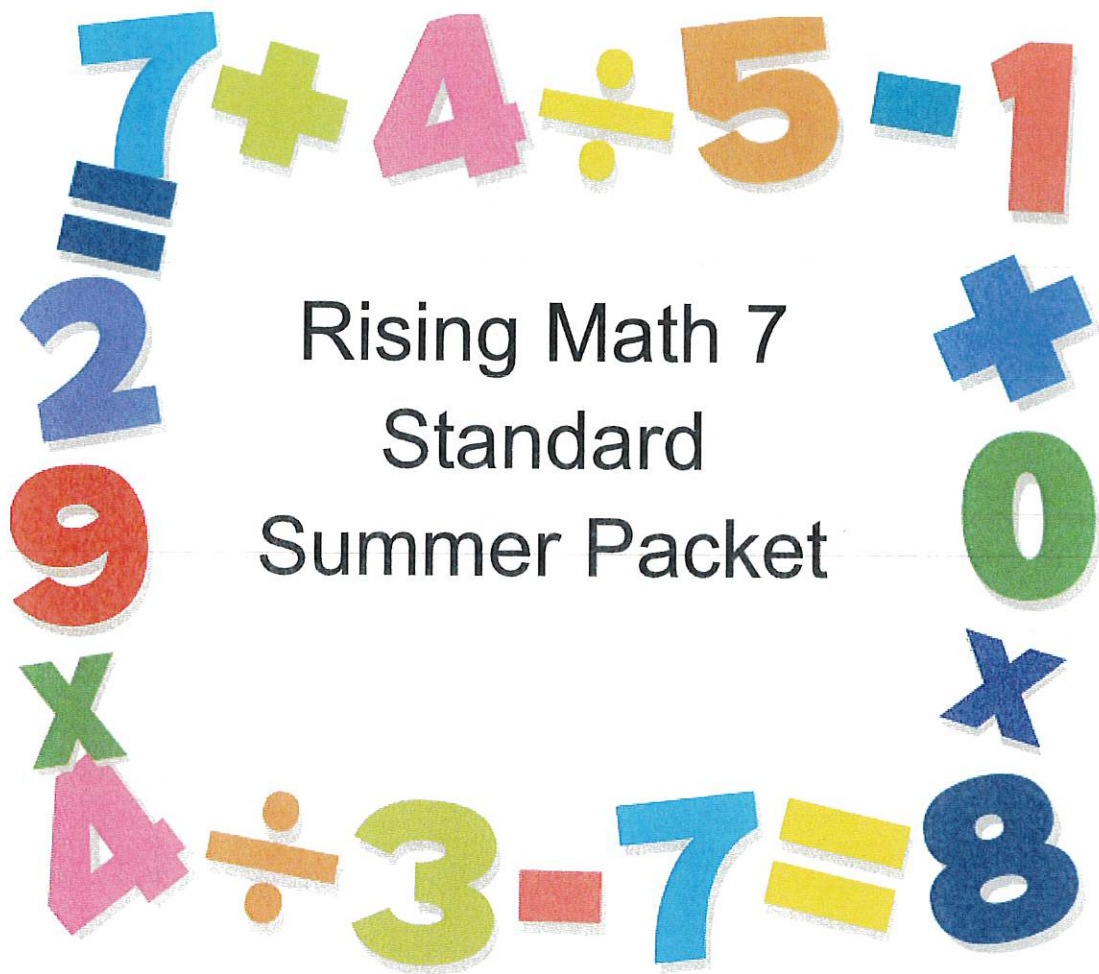
## Online Resources:

- **IXL** ([www.ixl.com](http://www.ixl.com)): IXL is a website that provides a wide variety of practice problems and explanations. Families may purchase a monthly subscription (\$13-\$20 monthly). With an account the student receives targeted practice in weak areas. Exercises for students entering 7th grade math can be found in the 6th grade section of the website.
- **Khan Academy** ([www.khanacademy.org](http://www.khanacademy.org)): free; provides step by step instructions and practice problems covering a wide variety of topics with video explanations of topics if the student is confused and needs a refresher. You can create a free account to track progress. Students should review Khan Academy's 6th grade math course, as well as 7th grade math units 3 and 5 (operations with negative numbers) and unit 9 (circumference and area of a circle).
- **Arcademics** ([www.arcademics.com/games](http://www.arcademics.com/games)): free (optional subscription adds data analysis); provides games covering arithmetic, ratios, time, decimals, and fractions.
- **Mathigon** ([www.mathigon.org](http://www.mathigon.org)): free; interactive fun practice and exposure to mathematical concepts. Great problem solving activities and multiplication practice. The flashcards provide fluency practice with visual models.
- **Math Playground** ([www.mathplayground.com](http://www.mathplayground.com)): free; math games providing good fluency practice. Website was developed by a teacher
- **Puzzle Playground** (<https://www.puzzleplayground.com>): free; same developer as Math Playground but focusing on logic puzzles.
- **Primary Games - Math Flashcards** (<https://www.primarygames.com/math/flashcards>): free flashcards for fluency practice, including multiplication facts.
- **Buzz Math** ([www.buzzmath.com](http://www.buzzmath.com)): free 30 day trial

## Apps:

- **iDevBooks: Long Division, Long Multiplication, Order of Operations, and Fraction Math**: apps for practicing arithmetic skills
- **Math Board**: Great for drilling math facts.
- **Quick Math+ - Multiplication Table and Arithmetic Game**: Good practice for math facts while trying to beat the clock.





Rising Math 7  
Standard  
Summer Packet

Name \_\_\_\_\_ Date \_\_\_\_\_

Write each number in standard form.

1.  $9 \times 10^2$  \_\_\_\_\_

2.  $(5 \times 10^4) + (2 \times 10^2) + (1 \times 10^0)$  \_\_\_\_\_

3.  $(3 \times 10^5) + (6 \times 10^3) + (4 \times 10^2) + (9 \times 10^1)$  \_\_\_\_\_

4.  $(7 \times 10^3) + (3 \times 10^2) + (7 \times 10^1) + (5 \times 10^0)$  \_\_\_\_\_

5. 4 thousand, 283 \_\_\_\_\_

6.  $700,000 + 400 + 20 + 3$  \_\_\_\_\_

Round to the place of the underlined digit.

7. 9,345,812 \_\_\_\_\_

8. 34,456,703 \_\_\_\_\_

9. 532,650,126 \_\_\_\_\_

10. 6.128 \_\_\_\_\_

11. 0.0912 \_\_\_\_\_

12. 8.236 \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ .

13. 90,743  90,347

14. 10,306  9,746

15. 4,516  4,561

16. 409  409

17. 16,489,550  16,498,505

18. 315  135

19. 5,555  44,444

20. 5,008  4,009

21. 767,800  776,800

22. 0.5  0.5000

23. 0.045  0.13

24. 2.78  2.774

25. 0.1  0.02

26. 4,000  4

27. 7  0.87

28. 0.09  0.099

29. 1.8  0.185

30. 2.5  2.15

31.  $-5$    $-6$

32.  $+2.8$    $-8$

33.  $-6$    $+1$

34.  $-0.4$    $-0.1$

35.  $-7$    $+7$

36.  $+3.2$    $-1.5$

37.  $-5$    $-8$

38.  $-9$    $+3$

39.  $+5$    $+3$

Name \_\_\_\_\_ Date \_\_\_\_\_

Write each number in word form and in expanded form. (Objective 1A)

1. 27,014,600,080 \_\_\_\_\_  
\_\_\_\_\_2. 12.30065 \_\_\_\_\_  
\_\_\_\_\_

Order from least to greatest. (Objective 1B)

3. 5.026 5.62 5.062 \_\_\_\_\_

4. 8.09 10.09 7.99 \_\_\_\_\_

5. 0.003 0.02 0.0025 \_\_\_\_\_

6. 30.078 12.512 50.2 \_\_\_\_\_

7. 1.044 1.404 1.44 \_\_\_\_\_

8. 0.345 0.0345 0.3405 \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$  for each  $\bigcirc$ . (Objective 1B)9. 1,738  $\bigcirc$  1,783      10. 313  $\bigcirc$  3.42      11. 0.419  $\bigcirc$  0.491

Round each number to the underlined place. (Objective 1B)

12. 499,051 \_\_\_\_\_      13. 8,041,998 \_\_\_\_\_14. 72,319,278 \_\_\_\_\_      15. 726,35 \_\_\_\_\_16. 0.050721 \_\_\_\_\_      17. 0.6598 \_\_\_\_\_

Write each number in standard form. (Objective 1A)

18.  $(8 \times 10^4) + (1 \times 10^3) + (5 \times 10^1)$  \_\_\_\_\_19.  $(7 \times 10^7) + (2 \times 10^5) + (3 \times 10^4) + (9 \times 10^2)$  \_\_\_\_\_20.  $(6 \times 10^5) + (4 \times 10^0)$  \_\_\_\_\_21.  $(2 \times 10^6) + (5 \times 10^5) + (1 \times 10^2) + (8 \times 10^0)$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Write the value of the underlined digit. (Objective 1A)

1.  $8\underline{1}3,956$  \_\_\_\_\_ 2.  $45.008\underline{0}3$  \_\_\_\_\_  
 3.  $0.\underline{0}95$  \_\_\_\_\_ 4.  $2.\underline{0}07$  \_\_\_\_\_  
 5.  $13,\underline{0}61,229$  \_\_\_\_\_ 6.  $402,\underline{0}00,000,000$  \_\_\_\_\_

Order from least to greatest. (Objective 1B)

7.  $8.50$   $8.05$   $5.88$  \_\_\_\_\_  
 8.  $12.9$   $12.19$   $12.91$  \_\_\_\_\_  
 9.  $0.303$   $0.3003$   $0.0303$  \_\_\_\_\_  
 10.  $4.28$   $4.028$   $4.128$  \_\_\_\_\_

Round each number to the underlined place. (Objective 1B)

11.  $1,\underline{9}34,825$  \_\_\_\_\_ 12.  $486,\underline{1}77$  \_\_\_\_\_  
 13.  $13,\underline{6}05,841$  \_\_\_\_\_ 14.  $348,\underline{5}00,000$  \_\_\_\_\_  
 15.  $875,\underline{9}52,119$  \_\_\_\_\_ 16.  $58,\underline{2}97,055$  \_\_\_\_\_

Write each number in expanded form, using powers of ten.  
(Objective 1A)

17.  $0.05$  \_\_\_\_\_ 18.  $4.2$  \_\_\_\_\_  
 19.  $4,000,600$  \_\_\_\_\_ 20.  $40.001$  \_\_\_\_\_

Find each sum or difference. Estimate to see if your answer is reasonable. (Objective 1C)

21.  $19.72 + 21.4$  \_\_\_\_\_ 22.  $359 + 10.9$  \_\_\_\_\_  
 23.  $24.2 - 6.5$  \_\_\_\_\_ 24.  $50 - 36.4$  \_\_\_\_\_  
 25.  $8.009 + 12.128$  \_\_\_\_\_ 26.  $1.06 - 0.588$  \_\_\_\_\_  
 27.  $8.4 - 6.03$  \_\_\_\_\_ 28.  $14,089.9 + 5,771.15$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Identify each number as prime or composite. (Objective 3A)

1. 27 \_\_\_\_\_ 2. 8 \_\_\_\_\_

3. 11 \_\_\_\_\_ 4. 50 \_\_\_\_\_

5. 5 \_\_\_\_\_ 6. 2 \_\_\_\_\_

7. 30 \_\_\_\_\_ 8. 3 \_\_\_\_\_

9. 40 \_\_\_\_\_ 10. 4 \_\_\_\_\_

Evaluate each expression. (Objective 3A)

11.  $3^3 \times 2$  \_\_\_\_\_ 12.  $2^3 \times 5^2$  \_\_\_\_\_ 13.  $9 \times 2^5$  \_\_\_\_\_ 14.  $3^2 \times 2^6$  \_\_\_\_\_15.  $4^2 \times 10$  \_\_\_\_\_ 16.  $2^8 \times 3$  \_\_\_\_\_ 17.  $3^2 \times 4^2$  \_\_\_\_\_ 18.  $8^3 \times 5$  \_\_\_\_\_Find the prime factorization for each of the following numbers. Express in exponential form. If the number is prime, write *prime*. (Objective 3A)

19. 18 \_\_\_\_\_ 20. 32 \_\_\_\_\_ 21. 24 \_\_\_\_\_

22. 36 \_\_\_\_\_ 23. 105 \_\_\_\_\_ 24. 59 \_\_\_\_\_

Which of the following numbers are divisible by 3 and 9?

Write *yes* or *no*. (Objective 3A)

25. 558 \_\_\_\_\_ 26. 290 \_\_\_\_\_ 27. 405 \_\_\_\_\_

28. 234 \_\_\_\_\_ 29. 1,029 \_\_\_\_\_ 30. 3,827 \_\_\_\_\_

Find the greatest common factor (GCF) for each pair of numbers, using prime factorization. (Objective 3B)

31. 6, 7 \_\_\_\_\_ 32. 8, 10 \_\_\_\_\_ 33. 12, 15 \_\_\_\_\_ 34. 8, 24 \_\_\_\_\_

35. 9, 30 \_\_\_\_\_ 36. 15, 40 \_\_\_\_\_ 37. 24, 80 \_\_\_\_\_ 38. 12, 40 \_\_\_\_\_

Find the least common multiple (LCM) of each pair of numbers. (Objective 3B)

39. 2, 4 \_\_\_\_\_ 40. 2, 5 \_\_\_\_\_ 41. 3, 6 \_\_\_\_\_ 42. 5, 8 \_\_\_\_\_

43. 10, 12 \_\_\_\_\_ 44. 15, 24 \_\_\_\_\_ 45. 18, 24 \_\_\_\_\_ 46. 20, 50 \_\_\_\_\_

# Spiral Review 4-6

Name \_\_\_\_\_ Date \_\_\_\_\_

Write an equivalent fraction with the given denominator. (Objective 3C)

1.  $\frac{3}{4} = \frac{\square}{12}$  \_\_\_\_\_      2.  $\frac{2}{3} = \frac{\square}{21}$  \_\_\_\_\_      3.  $\frac{5}{8} = \frac{\square}{48}$  \_\_\_\_\_      4.  $\frac{11}{12} = \frac{\square}{36}$  \_\_\_\_\_

5.  $\frac{4}{5} = \frac{\square}{45}$  \_\_\_\_\_      6.  $\frac{6}{7} = \frac{\square}{28}$  \_\_\_\_\_      7.  $\frac{7}{10} = \frac{\square}{450}$  \_\_\_\_\_      8.  $\frac{12}{15} = \frac{\square}{90}$  \_\_\_\_\_

Write each fraction in its simplest form. (Objective 3C)

9.  $\frac{15}{24}$  \_\_\_\_\_      10.  $\frac{28}{35}$  \_\_\_\_\_      11.  $\frac{28}{32}$  \_\_\_\_\_      12.  $\frac{18}{21}$  \_\_\_\_\_

13.  $\frac{12}{30}$  \_\_\_\_\_      14.  $\frac{25}{40}$  \_\_\_\_\_      15.  $\frac{24}{40}$  \_\_\_\_\_      16.  $\frac{16}{100}$  \_\_\_\_\_

Write  $>$ ,  $<$ , or  $=$  for each. (Objective 3D)

17.  $\frac{5}{8} \bigcirc \frac{3}{4}$       18.  $\frac{1}{2} \bigcirc \frac{2}{9}$       19.  $3\frac{2}{5} \bigcirc 3\frac{1}{4}$       20.  $\frac{7}{8} \bigcirc \frac{9}{10}$

21.  $\frac{3}{5} \bigcirc \frac{2}{3}$       22.  $2\frac{3}{7} \bigcirc 2\frac{1}{3}$       23.  $\frac{5}{6} \bigcirc \frac{5}{7}$       24.  $\frac{8}{12} \bigcirc \frac{28}{42}$

25.  $5\frac{7}{9} \bigcirc 5\frac{4}{5}$       26.  $8\frac{4}{5} \bigcirc 4\frac{5}{8}$       27.  $\frac{5}{8} \bigcirc \frac{5}{9}$       28.  $\frac{5}{8} \bigcirc \frac{5}{7}$

Write in order from least to greatest. (Objective 3D)

29.  $\frac{4}{5}$  0.77  $\frac{12}{20}$  \_\_\_\_\_      30. 5.4 5.38  $5\frac{1}{4}$  \_\_\_\_\_

31. 0.66 0.6  $\frac{2}{3}$  \_\_\_\_\_      32.  $\frac{5}{8}$  0.6  $\frac{4}{7}$  \_\_\_\_\_

33.  $\frac{5}{6}$   $\frac{1}{4}$   $\frac{3}{8}$  \_\_\_\_\_      34. 0.16  $\frac{1}{5}$   $\frac{1}{10}$  \_\_\_\_\_

35.  $\frac{3}{4}$   $\frac{3}{5}$   $\frac{3}{8}$  \_\_\_\_\_      36.  $\frac{1}{2}$  0.7  $\frac{3}{4}$  \_\_\_\_\_

Determine whether each fraction can be changed to a terminating decimal or a repeating decimal. (Objective 3D)

37.  $\frac{7}{9}$  \_\_\_\_\_      38.  $\frac{5}{6}$  \_\_\_\_\_      39.  $\frac{3}{7}$  \_\_\_\_\_

40.  $\frac{4}{5}$  \_\_\_\_\_      41.  $\frac{2}{3}$  \_\_\_\_\_      42.  $\frac{5}{8}$  \_\_\_\_\_

43.  $\frac{3}{6}$  \_\_\_\_\_      44.  $\frac{7}{15}$  \_\_\_\_\_      45.  $\frac{6}{8}$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Write each number in expanded form,  
using powers of ten. (Objective 1A)

1. 8,200,000,000 \_\_\_\_\_

2. 4,705 \_\_\_\_\_

3. 18.5 \_\_\_\_\_

4. 60,001 \_\_\_\_\_

5. 0.0003 \_\_\_\_\_

6. 9.042 \_\_\_\_\_

Round each number to the underlined place.  
(Objective 1B)

7. 4,792.31 \_\_\_\_\_

8. 760,398 \_\_\_\_\_

9. 0.203 \_\_\_\_\_

10. 4,849.337 \_\_\_\_\_

11. 5,830 \_\_\_\_\_

12. 456,453 \_\_\_\_\_

13. 945.93 \_\_\_\_\_

14. 14,556 \_\_\_\_\_

Compute. (Objectives 1C and 1D)

15.  $28 + 3.9$  \_\_\_\_\_

16.  $12 - 8.31$  \_\_\_\_\_

17.  $3,006 \times 75$  \_\_\_\_\_

18.  $0.28 \times 17$  \_\_\_\_\_

19.  $45.1 \times 2.68$  \_\_\_\_\_

20.  $1,208 \div 45$  \_\_\_\_\_

21.  $0.036 \div 5$  \_\_\_\_\_

22.  $66.3452 \div 9.4$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Determine whether each fraction can be changed to a terminating decimal or a repeating decimal. (Objective 3D)

1.  $\frac{15}{16}$  \_\_\_\_\_

2.  $\frac{3}{4}$  \_\_\_\_\_

3.  $\frac{5}{6}$  \_\_\_\_\_

4.  $\frac{8}{9}$  \_\_\_\_\_

5.  $\frac{7}{12}$  \_\_\_\_\_

6.  $\frac{4}{5}$  \_\_\_\_\_

7.  $\frac{9}{10}$  \_\_\_\_\_

8.  $\frac{2}{3}$  \_\_\_\_\_

9.  $\frac{7}{8}$  \_\_\_\_\_

Find each sum or difference. Write each answer in simplest form. (Objective 4A)

10.  $\frac{3}{8} + \frac{1}{8}$

11.  $\frac{1}{6} + \frac{5}{6}$

12.  $3\frac{4}{5} - 2\frac{3}{5}$

13.  $2\frac{3}{8} - \frac{7}{8}$

14.  $\frac{1}{2} + \frac{1}{6} + \frac{2}{3}$

15.  $4\frac{5}{8} + 2\frac{3}{4} + 8\frac{1}{2}$

16.  $28\frac{1}{3} + 5\frac{7}{8}$

17.  $8\frac{5}{8} + 1\frac{4}{5} + \frac{7}{10}$

18.  $12 - 4\frac{3}{7}$

19.  $8\frac{1}{4} - 2\frac{5}{6}$

20.  $3\frac{1}{3} - 2\frac{5}{6}$

21.  $\frac{7}{9} - \frac{1}{2}$

Multiply. Write each product in simplest form. (Objective 4B)

22.  $8 \times \frac{3}{4}$

23.  $\frac{4}{5} \times 20$

24.  $\frac{2}{3} \times \frac{5}{6}$

25.  $\frac{4}{9} \times \frac{3}{4}$

26.  $\frac{2}{3} \times \frac{3}{8}$

27.  $12 \times \frac{7}{8}$

28.  $4\frac{1}{2} \times \frac{2}{3}$

29.  $2\frac{1}{8} \times 4\frac{1}{6}$

30.  $5\frac{2}{3} \times \frac{16}{17}$

31.  $9 \times 4\frac{5}{6}$

32.  $2\frac{3}{16} \times \frac{4}{7}$

33.  $4\frac{2}{5} \times 6\frac{1}{2}$

# Spiral Review 5-6

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the reciprocal of each number. (Objective 4C)

1.  $\frac{1}{4}$  \_\_\_\_\_ 2.  $\frac{3}{5}$  \_\_\_\_\_ 3. 10 \_\_\_\_\_ 4.  $\frac{3}{4}$  \_\_\_\_\_

5.  $1\frac{1}{2}$  \_\_\_\_\_ 6.  $4\frac{3}{5}$  \_\_\_\_\_ 7.  $8\frac{1}{3}$  \_\_\_\_\_ 8.  $\frac{1}{9}$  \_\_\_\_\_

Solve. Write each answer in simplest form.  
(Objective 4C)

9.  $\frac{7}{8} \div \frac{1}{2}$  \_\_\_\_\_

10.  $\frac{1}{2} \div \frac{7}{8}$  \_\_\_\_\_

11.  $\frac{3}{5} \div \frac{9}{10}$  \_\_\_\_\_

12.  $\frac{1}{2} \div \frac{2}{3}$  \_\_\_\_\_

13.  $\frac{3}{4} \div \frac{5}{12}$  \_\_\_\_\_

14.  $\frac{1}{6} \div \frac{1}{2}$  \_\_\_\_\_

15.  $\frac{3}{8} \div \frac{2}{3}$  \_\_\_\_\_

16.  $8 \div \frac{2}{3}$  \_\_\_\_\_

17.  $\frac{1}{2} \div 4$  \_\_\_\_\_

18.  $3 \div \frac{1}{3}$  \_\_\_\_\_

19.  $10 \div \frac{2}{5}$  \_\_\_\_\_

20.  $1\frac{5}{6} \div 3\frac{2}{3}$  \_\_\_\_\_

21.  $25\frac{7}{8} \div 8\frac{5}{8}$  \_\_\_\_\_

22.  $1\frac{9}{10} \div 2\frac{3}{8}$  \_\_\_\_\_

23.  $3\frac{1}{9} \div 1\frac{1}{3}$  \_\_\_\_\_

24.  $6\frac{1}{8} \div \frac{7}{8}$  \_\_\_\_\_

25.  $6\frac{2}{3} \div 4\frac{1}{2}$  \_\_\_\_\_

26.  $2\frac{3}{4} \div 5\frac{2}{5}$  \_\_\_\_\_

27.  $8\frac{1}{2} \div 3\frac{2}{3}$  \_\_\_\_\_

28.  $4\frac{5}{6} \div 2\frac{3}{5}$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Write the value of the underlined digit.

(Objective 1A)

1.  $7\underline{7}3,929$  \_\_\_\_\_

2.  $1.2\underline{7}54$  \_\_\_\_\_

3.  $183.53\underline{7}9$  \_\_\_\_\_

4.  $410.\underline{0}02$  \_\_\_\_\_

5.  $\underline{8}5,003,500$  \_\_\_\_\_

6.  $12,\underline{9}04,063,750$  \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 1B)

7.  $0.201 \bigcirc 0.21$

8.  $9.8 \bigcirc 8.09$

9.  $4.50 \bigcirc 4.5000$

10.  $10.5 \bigcirc 10.05$

11.  $0.0042 \bigcirc 0.024$

12.  $7 \bigcirc 7.0000$

13.  $3 \bigcirc 30$

14.  $0.098 \bigcirc 0.4$

15.  $1,002 \bigcirc 10,003$

16.  $0.8405 \bigcirc 0.8054$

17.  $12.1 \bigcirc 12.01$

18.  $0.0600 \bigcirc 0.6$

Add or subtract. (Objective 1C)

19.  $5,679 + 821$  \_\_\_\_\_

20.  $8.44 + 9.7$  \_\_\_\_\_

21.  $12.73 + 8.567$  \_\_\_\_\_

22.  $3,065 - 2,956$  \_\_\_\_\_

23.  $10 - 1.08$  \_\_\_\_\_

24.  $156.2 - 79.56$  \_\_\_\_\_

Multiply or divide. (Objective 1D)

25.  $217 \times 320$  \_\_\_\_\_

26.  $12.9 \times 38$  \_\_\_\_\_

27.  $500 \times 2.44$  \_\_\_\_\_

28.  $2.4 \times 0.08$  \_\_\_\_\_

29.  $7.22 \times 5.4$  \_\_\_\_\_

30.  $17,125 \div 9$  \_\_\_\_\_

31.  $0.041 \div 40$  \_\_\_\_\_

32.  $812.5 \div 25$  \_\_\_\_\_

33.  $1.6 \div 2.5$  \_\_\_\_\_

34.  $78 \times 10^4$  \_\_\_\_\_

35.  $340 \times 10^{-3}$  \_\_\_\_\_

36.  $8.551 \div 10^2$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Add or subtract. Write each answer in simplest form. (Objective 4A)

1.  $\frac{3}{8} + 4\frac{3}{8}$  \_\_\_\_\_

2.  $\frac{5}{6} - \frac{1}{6}$  \_\_\_\_\_

3.  $5\frac{1}{6} - 3\frac{5}{6}$  \_\_\_\_\_

4.  $5\frac{1}{3} + 3\frac{1}{3}$  \_\_\_\_\_

5.  $\frac{1}{4} + \frac{1}{3}$  \_\_\_\_\_

6.  $\frac{5}{6} + \frac{2}{3}$  \_\_\_\_\_

7.  $10 + 4\frac{7}{8}$  \_\_\_\_\_

8.  $9 - \frac{11}{12}$  \_\_\_\_\_

9.  $7\frac{1}{3} - 4\frac{5}{6}$  \_\_\_\_\_

10.  $5\frac{1}{2} - 4\frac{3}{4}$  \_\_\_\_\_

11.  $12 + \frac{4}{5}$  \_\_\_\_\_

12.  $1 - \frac{3}{8}$  \_\_\_\_\_

13.  $4\frac{1}{2} + 8\frac{2}{3}$  \_\_\_\_\_

14.  $7\frac{1}{8} - 4\frac{3}{5}$  \_\_\_\_\_

15.  $\frac{5}{6} + \frac{7}{9}$  \_\_\_\_\_

Multiply. Write each product in simplest form.  
(Objective 4B)

16.  $\frac{3}{7} \times \frac{1}{6}$  \_\_\_\_\_

17.  $\frac{2}{3} \times \frac{3}{4}$  \_\_\_\_\_

18.  $\frac{4}{5} \times 20$  \_\_\_\_\_

19.  $36 \times \frac{3}{4}$  \_\_\_\_\_

20.  $8 \times \frac{4}{5}$  \_\_\_\_\_

21.  $\frac{2}{3} \times \frac{6}{7}$  \_\_\_\_\_

22.  $\frac{5}{8} \times \frac{2}{5}$  \_\_\_\_\_

23.  $\frac{7}{12} \times \frac{3}{4}$  \_\_\_\_\_

24.  $1\frac{3}{10} \times 2\frac{1}{2}$  \_\_\_\_\_

25.  $\frac{1}{4} \times 1\frac{1}{2}$  \_\_\_\_\_

26.  $7\frac{1}{2} \times 2\frac{9}{10}$  \_\_\_\_\_

27.  $1\frac{1}{9} \times 15$  \_\_\_\_\_

Divide. Write each quotient in simplest form.  
(Objective 4C)

28.  $\frac{1}{2} \div \frac{1}{3}$  \_\_\_\_\_

29.  $\frac{3}{8} \div \frac{5}{6}$  \_\_\_\_\_

30.  $\frac{2}{3} \div \frac{1}{2}$  \_\_\_\_\_

31.  $\frac{7}{8} \div \frac{3}{4}$  \_\_\_\_\_

32.  $\frac{1}{6} \div \frac{2}{3}$  \_\_\_\_\_

33.  $\frac{3}{4} \div \frac{2}{3}$  \_\_\_\_\_

34.  $\frac{4}{5} \div \frac{7}{15}$  \_\_\_\_\_

35.  $\frac{8}{9} \div \frac{2}{3}$  \_\_\_\_\_

36.  $10 \div \frac{4}{5}$  \_\_\_\_\_

37.  $\frac{5}{8} \div 10$  \_\_\_\_\_

38.  $12 \div \frac{3}{4}$  \_\_\_\_\_

39.  $\frac{3}{8} \div 6$  \_\_\_\_\_

40.  $2\frac{1}{2} \div 5$  \_\_\_\_\_

41.  $6 \div 1\frac{1}{2}$  \_\_\_\_\_

42.  $2\frac{1}{3} \div 1\frac{2}{3}$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 3D)

1.  $\frac{12}{20} \bigcirc \frac{3}{4}$

2.  $\frac{4}{5} \bigcirc \frac{8}{9}$

3.  $\frac{5}{16} \bigcirc 0.3125$

4.  $0.61 \bigcirc \frac{2}{3}$

5.  $\frac{5}{9} \bigcirc 0.54$

6.  $\frac{7}{12} \bigcirc 0.58$

7.  $\frac{1}{50} \bigcirc 0.020$

8.  $0.75 \bigcirc \frac{3}{4}$

Add or subtract. Write each answer in simplest form. (Objective 4A)

9.  $\frac{5}{6} + \frac{5}{6}$  \_\_\_\_\_

10.  $\frac{7}{8} - \frac{5}{8}$  \_\_\_\_\_

11.  $\frac{1}{5} + \frac{2}{5}$  \_\_\_\_\_

12.  $\frac{5}{9} - \frac{4}{9}$  \_\_\_\_\_

13.  $\frac{3}{10} - \frac{1}{10}$  \_\_\_\_\_

14.  $\frac{5}{16} + \frac{3}{16}$  \_\_\_\_\_

15.  $6 + 3\frac{1}{4}$  \_\_\_\_\_

16.  $4\frac{6}{7} + 2\frac{1}{7}$  \_\_\_\_\_

17.  $\frac{3}{8} + \frac{3}{5}$  \_\_\_\_\_

18.  $3\frac{3}{4} - 2$  \_\_\_\_\_

19.  $4 - \frac{5}{8}$  \_\_\_\_\_

20.  $2\frac{1}{3} - \frac{5}{8}$  \_\_\_\_\_

21.  $5\frac{1}{6} - 4\frac{1}{3}$  \_\_\_\_\_

22.  $7\frac{3}{8} - \frac{4}{5}$  \_\_\_\_\_

23.  $1\frac{7}{12} - \frac{3}{4}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

24.  $\frac{2}{3} \times \frac{3}{8}$  \_\_\_\_\_

25.  $\frac{5}{6} \times \frac{5}{6}$  \_\_\_\_\_

26.  $\frac{3}{16} \times \frac{1}{3}$  \_\_\_\_\_

27.  $\frac{3}{4} \times \frac{1}{6}$  \_\_\_\_\_

28.  $\frac{8}{9} \times \frac{3}{4}$  \_\_\_\_\_

29.  $8 \times \frac{5}{6}$  \_\_\_\_\_

30.  $\frac{5}{12} \times 15$  \_\_\_\_\_

31.  $2\frac{1}{4} \times \frac{2}{3}$  \_\_\_\_\_

32.  $7\frac{2}{3} \times 1\frac{3}{5}$  \_\_\_\_\_

33.  $3\frac{1}{2} \times 2\frac{5}{7}$  \_\_\_\_\_

34.  $5\frac{5}{8} \times 3\frac{5}{9}$  \_\_\_\_\_

35.  $8\frac{2}{3} \times 1\frac{2}{13}$  \_\_\_\_\_

Divide. Write each quotient in simplest form. (Objective 4C)

36.  $\frac{4}{5} \div \frac{3}{4}$  \_\_\_\_\_

37.  $\frac{3}{4} \div \frac{4}{5}$  \_\_\_\_\_

38.  $\frac{1}{6} \div \frac{1}{2}$  \_\_\_\_\_

39.  $\frac{3}{4} \div \frac{5}{6}$  \_\_\_\_\_

40.  $50 \div \frac{4}{5}$  \_\_\_\_\_

41.  $\frac{5}{6} \div 15$  \_\_\_\_\_

42.  $\frac{3}{8} \div 12$  \_\_\_\_\_

43.  $10 \div \frac{2}{5}$  \_\_\_\_\_

44.  $1\frac{11}{12} \div 3\frac{5}{6}$  \_\_\_\_\_

45.  $3\frac{3}{20} \div 1\frac{3}{4}$  \_\_\_\_\_

46.  $\frac{3}{8} \div 1\frac{1}{8}$  \_\_\_\_\_

47.  $3\frac{1}{16} \div 3\frac{1}{2}$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Add or subtract. Write each answer in simplest form. (Objective 4A)

1.  $\frac{5}{6} + \frac{1}{6}$  \_\_\_\_\_

2.  $\frac{3}{8} - \frac{1}{8}$  \_\_\_\_\_

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

4.  $2 - 1\frac{3}{5}$  \_\_\_\_\_

5.  $8\frac{1}{2} - 2\frac{1}{3}$  \_\_\_\_\_

6.  $7\frac{1}{6} + 3\frac{8}{9}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

7.  $\frac{5}{6} \times \frac{2}{3}$  \_\_\_\_\_

8.  $\frac{4}{5} \times \frac{3}{4}$  \_\_\_\_\_

9.  $1\frac{1}{2} \times 6\frac{2}{3}$  \_\_\_\_\_

10.  $15 \times \frac{5}{6}$  \_\_\_\_\_

11.  $5\frac{1}{4} \times 4\frac{5}{7}$  \_\_\_\_\_

12.  $\frac{11}{32} \times 7\frac{5}{22}$  \_\_\_\_\_

Divide. Write each quotient in simplest form. (Objective 4C)

13.  $\frac{3}{4} \div 2$  \_\_\_\_\_

14.  $\frac{1}{3} \div \frac{2}{3}$  \_\_\_\_\_

15.  $5 \div \frac{5}{6}$  \_\_\_\_\_

16.  $\frac{9}{10} \div 1\frac{1}{2}$  \_\_\_\_\_

17.  $16\frac{3}{16} \div 4\frac{5}{8}$  \_\_\_\_\_

18.  $42 \div 4\frac{2}{3}$  \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 5A)

23.  $-5$  ○  $-4$

24.  $0.3$  ○  $-1$

25.  $-\frac{4}{5}$  ○  $-0.8$

26.  $0$  ○  $-12$

27.  $-1$  ○  $-0.015$

28.  $-0.4$  ○  $3$

Add, subtract, multiply, or divide. (Objective 5B)

29.  $-4 + +9$  \_\_\_\_\_

30.  $-7 + +6$  \_\_\_\_\_

31.  $+5 - -3$  \_\_\_\_\_

32.  $-6 \times -2$  \_\_\_\_\_

33.  $-4 \div +2$  \_\_\_\_\_

34.  $-7 \times +5$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Solve. (Objective 7B)

1.  $\frac{3}{a} = \frac{9}{60}$  \_\_\_\_\_

2.  $\frac{b}{20} = \frac{8}{10}$  \_\_\_\_\_

3.  $\frac{c}{36} = \frac{8}{9}$  \_\_\_\_\_

4.  $\frac{30}{f} = \frac{6}{9}$  \_\_\_\_\_

5.  $\frac{7}{42} = \frac{n}{12}$  \_\_\_\_\_

6.  $\frac{25}{20} = \frac{k}{16}$  \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 7C)

14.  $\frac{2}{3}$   67%

15. 1  1%

16. 0.1  10%

17.  $\frac{7}{8}$    $87\frac{1}{2}\%$

18.  $\frac{3}{4}$   70%

19. 6%  0.6

20.  $\frac{1}{12}$   12%

21. 0.9  90%

22. 120%  12

23.  $\frac{4}{5}$   40%

24. 0.003  0.3%

25. 2  200%

26. 0.7  70%

27. 0.08  80%

28.  $\frac{1}{2}$   60%

29. 2%  0.2

30. 8  80%

31. 4%  400

# Spiral Review 9-2

Name \_\_\_\_\_ Date \_\_\_\_\_

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|--|--|
|  |  |
|  |  |
|  |  |
|  |  |

Find the prime factorization for each number.  
Express in exponential form. If the number is prime, write *prime*. (Objective 3A)

5. 31 \_\_\_\_\_      6. 400 \_\_\_\_\_      7. 72 \_\_\_\_\_  
8. 378 \_\_\_\_\_      9. 53 \_\_\_\_\_      10. 3,969 \_\_\_\_\_

Find the greatest common factor (GCF) for each pair of numbers.  
(Objective 3B)

11. 120, 165 \_\_\_\_\_      12. 24, 240 \_\_\_\_\_      13. 72, 11 \_\_\_\_\_      14. 78, 96 \_\_\_\_\_  
15. 96, 108 \_\_\_\_\_      16. 128, 352 \_\_\_\_\_      17. 56, 64 \_\_\_\_\_      18. 27, 198 \_\_\_\_\_

Write an equivalent fraction with the given denominator.  
(Objective 3C)

19.  $\frac{6}{42} = \frac{\square}{7}$  \_\_\_\_\_      20.  $\frac{2}{9} = \frac{\square}{81}$  \_\_\_\_\_      21.  $\frac{3}{4} = \frac{\square}{48}$  \_\_\_\_\_      22.  $\frac{8}{24} = \frac{\square}{6}$  \_\_\_\_\_  
23.  $\frac{40}{55} = \frac{\square}{165}$  \_\_\_\_\_      24.  $\frac{2}{10} = \frac{\square}{220}$  \_\_\_\_\_      25.  $\frac{3}{90} = \frac{\square}{30}$  \_\_\_\_\_      26.  $\frac{16}{20} = \frac{\square}{5}$  \_\_\_\_\_

Order from least to greatest. (Objective 3D)

27.  $\frac{5}{6}$  0.8  $\frac{3}{4}$  \_\_\_\_\_      28.  $\frac{4}{7}$   $\frac{9}{16}$  0.6 \_\_\_\_\_  
29.  $\frac{5}{12}$   $\frac{1}{3}$  0.35 \_\_\_\_\_      30. 5.008 5.08 5.018 \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Add or subtract. Write each answer in simplest form. (Objective 4A)

1.  $\frac{11}{12} + \frac{5}{12}$  \_\_\_\_\_ 2.  $\frac{5}{8} - \frac{1}{8}$  \_\_\_\_\_ 3.  $5\frac{1}{2} + 6\frac{1}{6}$  \_\_\_\_\_

4.  $7\frac{2}{3} - 3\frac{5}{6}$  \_\_\_\_\_ 5.  $8\frac{1}{4} - 2\frac{1}{3}$  \_\_\_\_\_ 6.  $3\frac{4}{5} + 9\frac{1}{3}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

7.  $\frac{2}{3} \times \frac{3}{8}$  \_\_\_\_\_ 8.  $\frac{1}{2} \times \frac{4}{5}$  \_\_\_\_\_ 9.  $7\frac{1}{2} \times \frac{1}{3}$  \_\_\_\_\_

10.  $2\frac{5}{8} \times 1\frac{6}{7}$  \_\_\_\_\_ 11.  $1\frac{1}{2} \times 2\frac{2}{3}$  \_\_\_\_\_ 12.  $\frac{3}{5} \times 1\frac{1}{4}$  \_\_\_\_\_

Divide. Write each quotient in simplest form. (Objective 4C)

13.  $\frac{5}{9} \div \frac{5}{6}$  \_\_\_\_\_ 14.  $\frac{7}{8} \div \frac{14}{19}$  \_\_\_\_\_ 15.  $45 \div \frac{2}{3}$  \_\_\_\_\_

16.  $\frac{8}{9} \div 8$  \_\_\_\_\_ 17.  $3\frac{1}{3} \div 4\frac{1}{3}$  \_\_\_\_\_ 18.  $3\frac{7}{16} \div 2\frac{3}{4}$  \_\_\_\_\_

Order from least to greatest. (Objective 5A)

23. 0.012   -0.011   -0.002 \_\_\_\_\_

24. -4   -7   -1 \_\_\_\_\_

25. -9   5   -2 \_\_\_\_\_

26.  $-\frac{1}{2}$    -0.004    $-\frac{2}{3}$  \_\_\_\_\_

Add, subtract, multiply, or divide. (Objective 5B)

27.  $-6 + +1$  \_\_\_\_\_ 28.  $-8 - -15$  \_\_\_\_\_ 29.  $+4 + -4$  \_\_\_\_\_ 30.  $+8 \div -8$  \_\_\_\_\_

31.  $-9 - -13$  \_\_\_\_\_ 32.  $-2 \times -9$  \_\_\_\_\_ 33.  $+36 \div -3$  \_\_\_\_\_ 34.  $-9 \times +1$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

## Solve. (Objective 7B)

1.  $\frac{3}{2} = \frac{18}{v}$  \_\_\_\_\_

2.  $\frac{x}{40} = \frac{48}{60}$  \_\_\_\_\_

3.  $\frac{6}{w} = \frac{9}{12}$  \_\_\_\_\_

4.  $\frac{84}{100} = \frac{336}{p}$  \_\_\_\_\_

5.  $\frac{h}{50} = \frac{75}{150}$  \_\_\_\_\_

6.  $\frac{72}{z} = \frac{60}{10}$  \_\_\_\_\_

7.  $\frac{50}{75} = \frac{r}{100}$  \_\_\_\_\_

8.  $\frac{14}{x} = \frac{35}{40}$  \_\_\_\_\_

9.  $\frac{w}{24} = \frac{27}{36}$  \_\_\_\_\_

## Order from least to greatest. (Objective 7C)

20. 16%  $\frac{1}{6}$  0.1 \_\_\_\_\_

21. 60%  $\frac{2}{3}$  0.67 \_\_\_\_\_

22.  $\frac{2}{5}$  20% 0.02 \_\_\_\_\_

23.  $\frac{5}{8}$  5.8 58% \_\_\_\_\_

24. 0.044 4%  $\frac{2}{5}$  \_\_\_\_\_

25.  $\frac{3}{2}$  1.2 130% \_\_\_\_\_

26.  $\frac{5}{6}$  83%  $\frac{5}{7}$  \_\_\_\_\_

27. 0.06 60% 0.059 \_\_\_\_\_

28. 35 35% 0.4 \_\_\_\_\_

29. 45%  $\frac{4}{5}$   $\frac{1}{2}$  \_\_\_\_\_

30. 9 300%  $\frac{10}{3}$  \_\_\_\_\_

31. 75% 7.5  $\frac{1}{4}$  \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the prime factorization for each number. Express in exponential notation. If the number is prime, write *prime*. (Objective 3A)

1. 108 \_\_\_\_\_      2. 784 \_\_\_\_\_      3. 71 \_\_\_\_\_

Find the least common multiple (LCM) for each pair of numbers. (Objective 3B)

4. 20, 30 \_\_\_\_\_      5. 42, 36 \_\_\_\_\_      6. 48, 64 \_\_\_\_\_      7. 15, 32 \_\_\_\_\_

Write an equivalent fraction with the given denominator. (Objective 3C)

8.  $\frac{2}{12} = \frac{\square}{18}$  \_\_\_\_\_      9.  $\frac{28}{77} = \frac{\square}{11}$  \_\_\_\_\_      10.  $\frac{1}{8} = \frac{\square}{104}$  \_\_\_\_\_      11.  $\frac{4}{24} = \frac{\square}{36}$  \_\_\_\_\_

Order from least to greatest. (Objective 3D)

12.  $\frac{9}{16}$   $\frac{4}{7}$  0.565 \_\_\_\_\_      13.  $\frac{3}{5}$   $\frac{2}{3}$  0.625 \_\_\_\_\_  
 14. 0.25  $\frac{2}{5}$   $\frac{3}{10}$  \_\_\_\_\_      15.  $\frac{3}{4}$  0.05  $\frac{1}{2}$  \_\_\_\_\_

Add or subtract. Write each answer in simplest form. (Objective 4A)

16.  $\frac{11}{16} + \frac{5}{8}$  \_\_\_\_\_      17.  $1\frac{3}{4} - \frac{5}{6}$  \_\_\_\_\_      18.  $\frac{5}{6} + 3\frac{1}{2}$  \_\_\_\_\_  
 19.  $4\frac{1}{2} + 6\frac{2}{3}$  \_\_\_\_\_      20.  $5\frac{2}{3} - 3\frac{3}{4}$  \_\_\_\_\_      21.  $\frac{2}{7} + 4\frac{5}{14}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

22.  $\frac{7}{12} \times \frac{3}{14}$  \_\_\_\_\_      23.  $\frac{4}{5} \times \frac{5}{12}$  \_\_\_\_\_      24.  $8\frac{1}{6} \times \frac{6}{7}$  \_\_\_\_\_  
 25.  $7\frac{1}{2} \times 4\frac{1}{3}$  \_\_\_\_\_      26.  $4\frac{7}{12} \times 7\frac{6}{11}$  \_\_\_\_\_      27.  $3\frac{1}{6} \times 2\frac{5}{12}$  \_\_\_\_\_

Divide. Write each quotient in simplest form. (Objective 4C)

28.  $1\frac{1}{7} \div \frac{6}{7}$  \_\_\_\_\_      29.  $\frac{5}{12} \div 10$  \_\_\_\_\_      30.  $4\frac{1}{8} \div 2\frac{3}{4}$  \_\_\_\_\_  
 31.  $24 \div \frac{2}{3}$  \_\_\_\_\_      32.  $30\frac{1}{10} \div 2\frac{4}{5}$  \_\_\_\_\_      33.  $1\frac{1}{8} \div \frac{3}{8}$  \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

Order from least to greatest. (Objective 5A)

1.  $-50$   $-500$   $-0.005$  \_\_\_\_\_

2.  $-2$   $1$   $0$   $-\frac{1}{2}$   $-\frac{2}{3}$  \_\_\_\_\_

Compute. (Objective 5B)

3.  $-8 + +12$  \_\_\_\_\_

4.  $-6 - -2$  \_\_\_\_\_

5.  $-9 \times +7$  \_\_\_\_\_

6.  $-24 \div -6$  \_\_\_\_\_

7.  $-5 + -7$  \_\_\_\_\_

8.  $+10 - +15$  \_\_\_\_\_

9.  $-10 \times -6$  \_\_\_\_\_

10.  $+42 \div -7$  \_\_\_\_\_

Evaluate. (Objective 6A)

11.  $13 - (2^2 + 3^2)$  \_\_\_\_\_

12.  $10 + 6 \times 5 \div 2$  \_\_\_\_\_

13.  $4^2 + (6 - 2) \times 3$  \_\_\_\_\_

14.  $\frac{6}{7} \times 6\frac{5}{8} - \frac{6}{7} \times 7\frac{3}{8}$  \_\_\_\_\_

Write an algebraic expression for each phrase. (Objective 6B)

15. 8 less than the product of 6 and  $p$  \_\_\_\_\_

16. the product of  $\frac{2}{3}$  and  $v$  \_\_\_\_\_

Solve. (Objective 6C)

17.  $8 \times r = 11$  \_\_\_\_\_

18.  $j - 18 = 4$  \_\_\_\_\_

19.  $a + 4 = 23$  \_\_\_\_\_

20.  $n \div 6 = 4$  \_\_\_\_\_

Are the ratios equivalent? Write yes or no. (Objective 7A)

21. 5 to 6  
5:6 \_\_\_\_\_

22. 2 flowers to 1 plant  
5 flowers to 2 plants \_\_\_\_\_

Solve. (Objective 7B)

23.  $\frac{3}{5} = \frac{15}{v}$  \_\_\_\_\_

24.  $\frac{4}{6} = \frac{x}{18}$  \_\_\_\_\_

25.  $\frac{m}{8} = \frac{21}{24}$  \_\_\_\_\_

Order from least to greatest. (Objective 7C)

26. 155% 150 1.5 \_\_\_\_\_

27.  $\frac{3}{8}$  38% 0.37 \_\_\_\_\_

Order of Operations

1. Grouping Symbols

2. Exponents

3. M/D L→R

4. A/S L→R

Order of Operations.

# Spiral Review 11-2

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the prime factorization for each number. Express in exponential form. If the number is prime, write *prime*. (Objective 3A)

3. 352 \_\_\_\_\_      4. 89 \_\_\_\_\_      5. 156 \_\_\_\_\_

Find the greatest common factor (GCF) for each pair of numbers. (Objective 3B)

6. 19, 57 \_\_\_\_\_      7. 60, 90 \_\_\_\_\_      8. 112, 154 \_\_\_\_\_

Write an equivalent fraction with the given denominator. (Objective 3C)

9.  $\frac{4}{5} = \frac{\square}{80}$  \_\_\_\_\_      10.  $\frac{9}{8} = \frac{\square}{96}$  \_\_\_\_\_      11.  $\frac{35}{50} = \frac{\square}{10}$  \_\_\_\_\_      12.  $\frac{150}{180} = \frac{\square}{6}$  \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 3D)

13.  $\frac{5}{8} \bigcirc \frac{2}{3}$       14.  $\frac{5}{12} \bigcirc \frac{7}{15}$       15.  $0.4 \bigcirc \frac{3}{8}$       16.  $0.05 \bigcirc \frac{1}{20}$

Add or subtract. Write each answer in simplest form. (Objective 4A)

17.  $1\frac{5}{7} + \frac{11}{14}$  \_\_\_\_\_      18.  $5\frac{3}{16} - 4\frac{3}{4}$  \_\_\_\_\_

19.  $10\frac{2}{3} + 1\frac{3}{5}$  \_\_\_\_\_      20.  $1\frac{1}{24} - \frac{2}{3}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

21.  $\frac{5}{12} \times \frac{2}{3}$  \_\_\_\_\_      22.  $1\frac{7}{8} \times 3\frac{1}{5}$  \_\_\_\_\_

23.  $\frac{9}{10} \times \frac{2}{15}$  \_\_\_\_\_      24.  $3\frac{3}{5} \times 2\frac{7}{9}$  \_\_\_\_\_

## Spiral Review 12-2

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the prime factorization for each number. Express in exponential form. If the number is prime, write *prime*. (Objective 3A)

1. 567 \_\_\_\_\_      2. 37 \_\_\_\_\_      3. 2,400 \_\_\_\_\_

Find the greatest common factor. (Objective 3B)

4. 44, 66 \_\_\_\_\_      5. 180, 72 \_\_\_\_\_      6. 75, 50 \_\_\_\_\_

Write an equivalent fraction with the given denominator. (Objective 3C)

7.  $\frac{9}{12} = \frac{\square}{4}$  \_\_\_\_\_      8.  $\frac{10}{15} = \frac{\square}{105}$  \_\_\_\_\_      9.  $\frac{24}{25} = \frac{\square}{275}$  \_\_\_\_\_      10.  $\frac{39}{54} = \frac{\square}{18}$  \_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$ . (Objective 3D)

11.  $\frac{3}{8} \bigcirc \frac{3}{7}$       12.  $\frac{5}{9} \bigcirc \frac{7}{15}$       13.  $0.67 \bigcirc \frac{2}{3}$       14.  $0.35 \bigcirc \frac{7}{20}$

Add or subtract. Write each answer in simplest form. (Objective 4A)

15.  $2\frac{5}{7} + 3\frac{4}{7}$  \_\_\_\_\_      16.  $9\frac{2}{3} - 4\frac{3}{4}$  \_\_\_\_\_      17.  $6\frac{1}{8} + 1\frac{19}{20}$  \_\_\_\_\_      18.  $1\frac{1}{6} - \frac{5}{8}$  \_\_\_\_\_

Multiply. Write each product in simplest form. (Objective 4B)

19.  $\frac{5}{7} \times \frac{14}{25}$  \_\_\_\_\_      20.  $3\frac{1}{8} \times 3\frac{1}{5}$  \_\_\_\_\_      21.  $\frac{2}{3} \times \frac{3}{16}$  \_\_\_\_\_      22.  $2\frac{5}{8} \times 5\frac{5}{7}$  \_\_\_\_\_

Divide. Write each quotient in simplest form. (Objective 4C)

23.  $\frac{3}{5} \div \frac{1}{5}$  \_\_\_\_\_      24.  $\frac{7}{12} \div \frac{7}{8}$  \_\_\_\_\_      25.  $3\frac{3}{4} \div 15$  \_\_\_\_\_      26.  $4\frac{29}{40} \div 1\frac{4}{5}$  \_\_\_\_\_

