General Math Final Review (Math 0093)

Rewrite the following number using digits.

1) Eight thousand, one hundred sixty-seven

Write a word name for the number in the sentence.

2) One of the statistics to come out of the election was that 45,826,498 people, or about half the population, cast votes.

Add.

3) -75 + -60

Write as an addition problem and find the sum.

4) The team gained 15 yards on the first play and lost 11 yards on the second. What was their net gain or loss?

Subtract.

5) $^{-}172 - 205$

6) $49 - {}^{-}49$

Simplify.

7) $^{-}5 - (^{-}13 + 6) + {}^{-}11$

Round as indicated.

8) 1444 to the nearest hundred

Multiply.

9) $7 \cdot 2 \cdot -4$

Solve the problem.

10) Linda took her car in to be serviced. In addition to an oil change which cost $30, she purchased four new tires at a cost of 44 dollars plus $4 installation each. What was her total bill?

Divide.

11) $\frac{-342}{7}$

Simplify.

12) $-7 \cdot -|16| \div 8 \cdot -|3|$

13) $4 \cdot 9 - 9 \cdot 2 + 3 \cdot 5$

14) $144 \div (-6)^2 + -7$

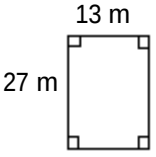
15) $9 - {}^{-}2(-2)^3$

Solve the problem.

16) What is $\frac{7}{0}$ equal to?

Find the area.

17)



Write an algebraic expression, using x as the variable.

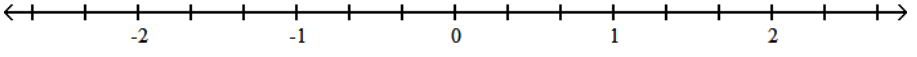
18) 141 minus a number

Solve the problem.

19) In a microbiology class of 29 students, 25 students are graduate students. What fraction of the students are graduate students?

Locate the fraction on the number line.

20) $\frac{2}{3}$, $-\frac{2}{3}$



Rewrite the fraction as an equivalent fraction with the given denominator.

21) $-\frac{2}{8} = -\frac{?}{56}$

Identify the number as prime, composite, or neither.

22) 37

Find the prime factorization of the number.

23) 108

Write the numerator and denominator of the fraction as a product of prime factors. Then use the prime factorization to write the fraction in lowest terms.

24) $\frac{21}{84}$

Write the fraction in lowest terms by using prime factorization.

25) $\frac{140}{180}$

Write your answer in lowest terms.

26) Rosetta's bonus for the year was $1700. She spent $800 on new furniture. What fraction of her bonus was spent on furniture?

Multiply. Write the product in lowest terms.

27) $\left(\frac{8}{5}\right)\left(\frac{8}{3}\right)$

Divide. Write the quotient in lowest terms.

28) $\left(-\frac{3}{7}\right) \div \left(\frac{5}{11}\right)$

29) $\frac{10}{13} \div -5$

Solve the problem.

30) A warehouse stores 1450 different inventory items. $\frac{4}{25}$ of these items are perishable. How many of the inventory items are perishable?

Find the sum or difference. Write the answer in lowest terms.

31) $-\frac{1}{15} - \frac{1}{5}$

32) $-\frac{3}{25} - \left(-\frac{3}{5}\right)$

Write the mixed number as an improper fraction.

33) $-5\frac{2}{7}$

Write the improper fraction as a mixed number in simplest form.

34) $\frac{17}{5}$

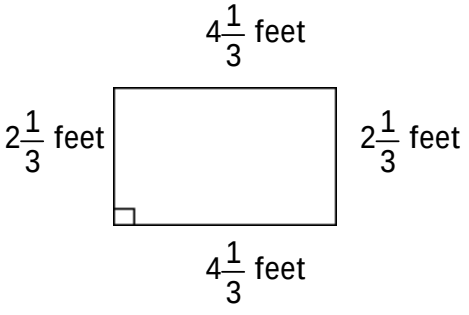
First, round the mixed numbers to the nearest whole number and estimate the answer. Then find the exact answer and write it in simplest form.

35) $6\frac{2}{3} \cdot 6$

36) $20\frac{2}{7} - \frac{4}{7}$

Find the requested quantity. Write the answer in simplest form.

37) Find the perimeter.



Write the decimal as a fraction or mixed number in lowest terms.

38) 0.88

Write the decimal in numbers.

39) Fourteen and seven hundred forty seven thousandths

Round the money amount to the specified place.

40) $32.55 to the nearest dollar.

Multiply.

41) $(1.8)(-4.96)$

Solve the problem.

42) A certain person burns 7.8 calories per minute while walking. How many calories will be burned if that person walks for 4 hours?

Divide.

43) $4.5\overline{)585}$

Solve the problem.

44) The distance from the downtown station to the last stop on a commuter railroad line is 40.3 miles. The distance between stops is about 3.1 miles. How many stops are there?

Write the fraction or mixed number as a decimal. Round to the nearest thousandth if necessary.

45) $\frac{11}{40}$

Arrange in order from smallest to largest.

46) 1.853, 1.538, 1.583, 1.358

47) 7.25, $7\frac{5}{8}$, 7.52, $7\frac{4}{9}$

Find the mean for the list of numbers.

48) Inches of snowfall per month: 7.2, 8.1, 4.9, 8.1, 4.7
Round answer to the nearest tenth if necessary.

Find the grade point average for a student earning the following grades. Assume a = 4, B = 3, C = 2, D = 1, and F = 0. Round answer to the nearest tenth.

49)

Credits	Grade
4	C
1	B
5	A
5	A

Find the median for the data given.

50) Number of steaks served: 4, 4, 15, 29, 34, 43, 46

51) Number of video tapes borrowed each day: 80, 127, 240, 245, 322, 464

Find the mode or modes for the list of numbers.

52) Number of samples taken each day: 5, 9, 34, 3, 2, 8, 67, 1, 4, 16

53) Ages of parents (in years) at the school: 20, 32, 46, 32, 49, 32, 49

Write the ratio as a fraction in lowest terms.

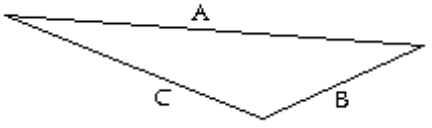
54) 25 miles to 85 miles

Write the ratio as a fraction in lowest terms. Be sure to make all necessary conversions.

55) 5 yards to 9 feet

For the given figure, find the ratio of the length of the longest side to the length of the shortest side. Write the ratio as a fraction in lowest terms.

56)



A = 9 inches
B = 4 inches
C = 8 inches

Solve the problem. Write ratios in lowest terms.

57) Bob is 28 years old, and Susan is 21 years old. Find the ratio of his age to hers.

Write the following as a rate in lowest terms.

58) 12 tests for 24 students

Find the unit rate.

59) 136 miles on 4 gallons of gas

Write the percent as a decimal.

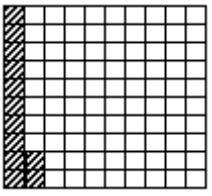
60) 62.3%

Write the decimal as a percent.

61) 0.866

Write a fraction and a percent for the shaded part of the figure.

62)



Supply the missing numbers. Round decimals to the nearest thousandth and percents to the nearest tenth of a percent.

63) fraction decimal percent

0.073

Use the percent proportion to answer the question.

64) What is 5% of 700 hotels?

Use the percent proportion to answer the question. Round your answer to the nearest tenth of a percent, if necessary.

65) What percent of 2632 mulberries is 18 mulberries?

Use the percent proportion to answer the question.

66) 41% of what number of yards is 82 yards?

Solve the problem.

67) A telephone costs $367. If the sales tax rate is 5%, how much tax is charged and what is the total price? Round your answers to the nearest cent.

68) Dianne and Dave split a $40.61 dinner bill plus a 20% tip. How much did each person pay, rounded to the nearest cent?

69) Tom Jones took five exams in Math 0093 class. His scores were: 75, 68, 80, 92, and 83. What is his average?

Solve the equation.

70) $z - 3 = -7$

71) $9p - 18 = 8p - 8$

72) $\frac{1}{4}x - 1 = -\frac{3}{4}x$

73) $\frac{1}{3}x = -9$

74) $3a = -6$

75) $-\frac{4}{7}p = -\frac{5}{7}$

76) $-x = 41$