

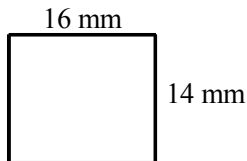
North Seattle Community College
Math 081
Chapter 1 Review

1. Write the place value of the digit 7 in the number 127,946,538.
2. Use words to write 37,684.
3. Mt. Kabru, India is twenty-four thousand, two feet high. Write this number in standard form.

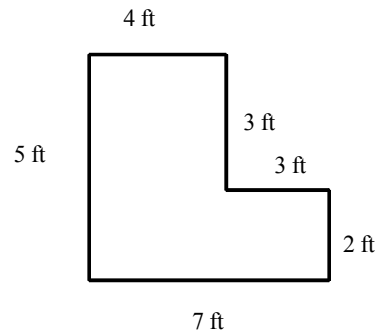
4.
$$\begin{array}{r} 23,694 \\ 3,279 \\ + 500 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 21,034 \\ 1,294 \\ + 894 \\ \hline \end{array}$$

6. Find the perimeter of the rectangle.



7. Find the perimeter of shape shown below.



8. $647 - 427 =$

9.
$$\begin{array}{r} 54,014 \\ - 41,225 \\ \hline \end{array}$$

10. The temperature on February 3rd in Juneau, Alaska was 54° F. On August 3rd the temperature was 22° F warmer. What was the temperature on August 3rd?
11. A theater can sell 169 tickets for a show. If 80 tickets have been sold, how many tickets are still left to be sold?
12. There were 7748 participants in the county-wide blood drive. As a reporter for the local newspaper you are covering the event. In your article you want to report the number of participants to the nearest hundred. What number will you use?

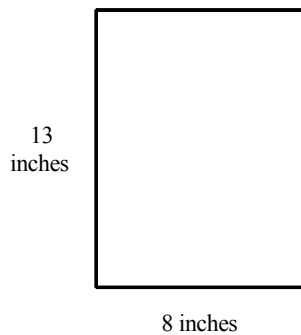
13. Round 74,595,751 to the nearest thousand.
14. On Back to School Night, orientation was held in two areas of the school. A group of 621 parents, teachers, and students met in the cafeteria and 163 met in the gym. By rounding to the nearest hundred, estimate how many people were at the orientation.

Multiply:

15.
$$\begin{array}{r} 55 \\ \times 52 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 9026 \\ \times 189 \\ \hline \end{array}$$

17. What is the area of this rectangle?



18.
$$2 \overline{)953}$$

19. $221 \div 12 =$

20. When Dawn was getting freight ready for shipment she made a row with 15 identical crates that was 750 centimeters long. How long was each crate?
21. Find the average of 68, 36, 24, 63, and 24.
22. Gwen Halstrom is planning to attend University of West Charlton. The annual tuition is \$15,019, the cost of on-campus housing is \$6743, and the meal plan she has selected costs \$1286. Gwen also expects to pay \$442 for books for the year. How much will it cost Gwen to attend University of West Charlton for one year?

23. Evaluate: $3^3 \cdot 2^2$

24. Find $2^4 + 7^2$.

25. Simplify: $\frac{11(5 - 1) + 4}{4^2 - 4}$

- [1] millions
- [2] thirty-seven thousand,six hundred
eighty-four
- [3] 24,002
- [4] 27,473
- [5] 23,222
- [6] 60 mm
- [7] 24 ft
- [8] 220
- [9] 12,789
- [10] 76° F
- [11] 89 tickets
- [12] 7700
- [13] 74,596,000
- [14] 800 people
- [15] 2860
- [16] 1,705,914
- [17] 104 square inches
- [18] 476 R 1
- [19] 18 R 5
- [20] 50 cm
- [21] 43
- [22] \$23,490
- [23] 108
- [24] 65
- [25] 4

1. Add: $\frac{5}{12} + \frac{9}{12}$

[1] _____

2. Subtract: $\frac{11}{18} - \frac{7}{18}$

[2] _____

3. You shared a pizza with two friends. You ate $\frac{3}{7}$ of the pizza. One of your friends ate $\frac{2}{7}$ of the pizza and the other ate $\frac{1}{7}$ of the pizza. What fraction of the pizza did you and your friends eat?

[3] _____

4. Find the least common multiple of 42 and 72.

[4] _____

5. Find a fraction equivalent to $\frac{1}{3}$ with a denominator of 36.

[5] _____

6. Add: $\frac{6}{10} + \frac{1}{6}$

[6] _____

7. Subtract and simplify: $\frac{11}{12} - \frac{1}{3}$

[7] _____

8. Subtract: $\frac{6}{7} - \frac{1}{4}$

[8] _____

9. Tina has $\frac{1}{2}$ of a bottle of juice, Peggy has $\frac{3}{4}$ of a bottle of juice, and Mary has $\frac{5}{8}$ of a bottle of juice. How much juice do they have altogether? Write the answer in simplest form.

[9] _____

10. Peter drank $\frac{4}{9}$ of a quart of milk. Patrick drank $\frac{2}{7}$ of a quart. How much more of a quart did Peter drink? Write the answer in simplest form.

[10] _____

Add:

11. $2\frac{5}{8} + 3\frac{7}{8}$

[11] _____

12.
$$\begin{array}{r} 8\frac{2}{7} \\ + 4\frac{8}{9} \\ \hline \end{array}$$

[12] _____

Subtract:

13.
$$\begin{array}{r} 26\frac{3}{5} \\ - 21\frac{1}{6} \\ \hline \end{array}$$

[13] _____

Subtract:

$$\begin{array}{r} 14. \quad 34 \\ - 9\frac{6}{11} \\ \hline \end{array}$$

[14] _____

15. Matt has $7\frac{1}{4}$ yards of wire. To make a fence he will need to use $2\frac{5}{8}$ yards. How much wire will he have left after the fence is made?

[15] _____

16. Marcus used $4\frac{2}{3}$ cups of flour, $2\frac{3}{4}$ cups of white sugar, $5\frac{5}{6}$ cups of water, and $6\frac{1}{2}$ cups of brown sugar in his recipe. How many cups of ingredients did he use? Write the answer in simplest form.

[16] _____

17. Rosa made a triple batch of molasses cookies. She used $7\frac{5}{8}$ cups of flour. Before she made her cookies she had $9\frac{3}{4}$ cups of flour. How much flour does Rosa have left?

[17] _____

18. Compare the two fractions using $<$, $>$, or $=$.

$$\frac{1}{2} \bigcirc \frac{3}{4}$$

[18] _____

Simplify:

$$19. \quad \frac{3}{5} \div \frac{1}{4} + \frac{1}{3}$$

[19] _____

Simplify:

20. $\frac{2}{3} - \frac{5}{6} \cdot \frac{1}{4}$

[20] _____

21. Find the average of the list of numbers. $\frac{2}{5}$ and $\frac{6}{7}$

[21] _____

22. Multiply: $\frac{3}{4} \cdot \frac{1}{24}$

[22] _____

23. Divide: $\frac{27}{5} \div \frac{9}{7}$

[23] _____

24. Simplify: $\frac{5(5 - 3) + 2}{2^3 - 2}$

[24] _____

25. A baker at Harriet's Bakery misread the directions and used $6\frac{5}{9}$ cups of flour in a recipe.

It was $1\frac{5}{6}$ times too much flour. How much flour should the baker have used?

[25] _____

Divide:

26. $4\frac{5}{8} \div \frac{23}{24}$

[26] _____

Divide:

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

[27] _____

28. Multiply: $4\frac{2}{5} \cdot 5\frac{1}{2}$

[28] _____

[1] $1\frac{1}{6}$

[2] $\frac{2}{9}$

[3] $\frac{6}{7}$ of the pizza

[4] 504

[5] $\frac{12}{36}$

[6] $\frac{23}{30}$

[7] $\frac{7}{12}$

[8] $\frac{17}{28}$

[9] $1\frac{7}{8}$ bottles

[10] $\frac{10}{63}$ qt.

[11] $6\frac{1}{2}$

[12] $13\frac{11}{63}$

[13] $5\frac{13}{30}$

[14] $24\frac{5}{11}$

[15] $4\frac{5}{8}$ yd

[16] $19\frac{3}{4}$ cups

[17] $2\frac{1}{8}$ cups

[18] $\frac{1}{2} < \frac{3}{4}$

[19] $2\frac{11}{15}$

[20] $\frac{11}{24}$

[21] $\frac{22}{35}$

[22] $\frac{1}{32}$

[23] $4\frac{1}{5}$

[24] 2

[25] $3\frac{19}{33}$ cups

[26] $4\frac{19}{23}$

[27] $7\frac{5}{7}$

[28] $24\frac{1}{5}$

1. Write as a decimal in standard form:
forty-one and thirty-seven thousandths

[1] _____

2. Write 0.9308 in words.

[2] _____

3. Write 0.41 as a fraction in simplest form.

[3] _____

4. Express 2.2 as a mixed number in simplest form.

[4] _____

5. Write $\frac{13}{1,000}$ as a decimal.

[5] _____

6. Insert $<$, $>$, or $=$ to form a true statement:
33.991 _____ 33.991001

[6] _____

7. What is \$460.258 rounded to the nearest cent?

[7] _____

8. Round 0.554465 to the hundred-thousandths place.

[8] _____

9. $30.35 + 221.884 + 2.2972 =$

[9] _____

10. In the 1996 Olympics, the winning time for the women's 100 m race was 10.54 seconds. The winning time of the men's race was 9.92 seconds. How much faster was the men's time?

[10] _____

11. Concha's monthly gross pay is \$3048.71. If she has the following deductions, what is the net pay?

Federal Tax: \$461.04 Savings Plan: \$30.00
State Tax: \$101.89 Insurance: \$203.68
FICA: \$245.52

[11] _____

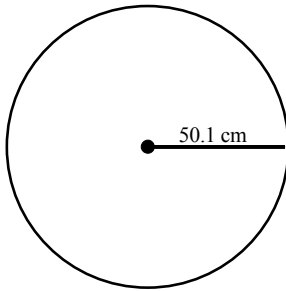
12. $0.527 \times 1.3 =$

[12] _____

13. $0.001 \times 18.2 =$

[13] _____

14. Find the circumference of the circle. Use $\pi = 3.14$.



[14] _____

15. One ball bearing has a weight of 6.293 grams. What is the weight of 100 ball bearings?

[15] _____

16. $0.8 \overline{)2.08}$

[16] _____

17. $7.02 \div 0.009 =$

[17] _____

18. Divide. $\frac{155.11}{1000}$

[18] _____

19. Chris sells roses for \$13.99 a dozen. At the end of the day he had collected \$125.91. About how many dozens of roses did he sell?

[19] _____

20. Glenna's car used 12.84 gallons of gas to go 188.62 miles. Estimate the number of miles per gallon Glenna's car gets by rounding your answer to the nearest hundredth.

[20] _____

Simplify:

21. $5.9 \times 1.7 + 2.1 \div 3.0$

[21] _____

22. $\frac{0.04 + 0.652}{0.2}$

[22] _____

23. Write $\frac{13}{20}$ as a decimal.

[23] _____

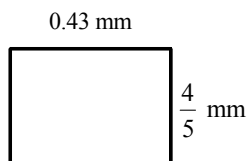
24. Write $\frac{29}{6}$ as a decimal.

[24] _____

25. Write the numbers in order from least to greatest. $\frac{5}{7}$, $\frac{2}{3}$, 0.690476

[25] _____

26. Find the area of the rectangle.



[26] _____

- [1] 41.037
- [2] nine thousand three hundred eight ten-thousandths
- [3] $\frac{41}{100}$
- [4] $2\frac{1}{5}$
- [5] 0.013
- [6] $33.991 < 33.991001$
- [7] \$460.26
- [8] 0.55447
- [9] 254.5312
- [10] 0.62 sec
- [11] \$2006.58
- [12] 0.6851
- [13] 0.0182
- [14] 314.628 cm
- [15] 629.3 g
- [16] 2.6
- [17] 780
- [18] 0.15511
- [19] 9 dozens
- [20] 14.69 mi/gal
- [21] 10.73
- [22] 3.46

[23] 0.65

[24] $4.8\bar{3}$

[25] $\frac{2}{3}, 0.690476, \frac{5}{7}$

[26] 0.344 mm^2

1. The approximate ratio of the circumference to the diameter of an oil barrel is 358 cm to 114 cm. Write this ratio as a fraction in simplest form.

[1] _____

2. Write the following as a rate in simplest form: 63 flowers for 99 shrubs

[2] _____

3. Write as a unit rate. 432 km in 8 h

[3] _____

4. If Super Store sells 3 art erasers for \$0.60 and Mighty Mart sells 16 of the same kind of art erasers for \$4.00, which store offers the better buy?

[4] _____

5. A writer was paid \$35,000 for a 5000-word article. Find the rate per word.

[5] _____

6. Is $\frac{0.9}{1.9} = \frac{1.8}{5.7}$ a true proportion?

[6] _____

7. Terry Smith took a survey of college students and found that 40 out of 42 students are liberal arts majors. If a college has 11,966 students, what is the expected number of students who are liberal arts majors?

[7] _____

8. A worker in an assembly line takes 9 hours to produce 24 parts. At that rate how many parts can she produce in 36 hours?

[8] _____

9. Write 2.11% as a decimal.

[9] _____

10. Write 8.2 as a percent.

[10] _____

11. In a can of mixed nuts, Kevin found that 0.07 of them were cashews. What percent were cashews?

[11] _____

12. Write $37\frac{1}{2}\%$ as a fraction in simplest form.

[12] _____

13. Write $3\frac{2}{7}$ as a percent. Round to the nearest hundredth of a percent.

[13] _____

14. The *Danville Daily News* did a survey and discovered that 84.6% of the households in Copper County subscribed to their paper. Write this percent as a fraction.

[14] _____

15. 30% of what number is 42?

[15] _____

16. What number is 190% of 80?

[16] _____

17. 208.56 is what percent of 66?

[17] _____

18. A golf group planned a trip to Hawaii and 16 of the members signed up to go. If this is 20% of the club, how many members does the golf group have in total?

[18] _____

19. Of every 5 hot dogs Palmer sold, 3 had mustard. What percent had mustard?

[19] _____

20. Russell sold 528 chocolate bars; 25% had almonds. How many chocolate bars had almonds?

[20] _____

21. The addition of the new high school is projected to cause a 26% decrease in the number of students attending Goldendale High School. If the current enrollment is 1159 students, how many students are expected to attend Goldendale High after the new school is completed?

[21] _____

22. The assessed value of homes in a county increased by 2.25% over the past year. Last year a house was assessed at \$118,400. What is the dollar value of the increase?

[22] _____

23. The sales tax rate in a certain state is 4%. Find the total price paid for a pair of shoes that costs \$43.

[23] _____

24. The total cost of a riding lawn mower priced \$2375.99 is \$2518.55. What is the sales tax rate?

[24] _____

25. Hilda Arrdmar sold a house for \$113,600 and received a commission of \$9088.00. Find the commission rate.

[25] _____

26. An article regularly selling for \$87.92 is advertised at 15% off. Find the sale price to the nearest cent.

[26] _____

27. Vicki paid \$14.40 for a sweater that usually sells for \$18. What percent discount did she receive?

[27] _____

28. Find the simple interest earned on \$800 invested at 6.5% for 3 months.

[28] _____

29. Find the amount owed at the end of 5 years if \$5000 is loaned at a rate of 8% compounded semiannually.

[29] _____

30. Suppose that in 1855, one of your ancestors invested \$39 compounded annually at 5.5%. If this money were left to you, how much would you have had at the end of 1997? Round to the nearest dollar.

[30] _____

[1] $\frac{179}{57}$

[2] $\frac{7 \text{ flowers}}{11 \text{ shrubs}}$

[3] 54 km/h

[4] Super Store

[5] \$7.00 per word

[6] no

[7] 11,396

[8] 96 parts

[9] 0.0211

[10] 820%

[11] 7%

[12] $\frac{3}{8}$

[13] 328.57%

[14] $\frac{423}{500}$

[15] 140

[16] 152

[17] 316%

[18] 80

[19] 60%

[20] 132

[21] 858 students

[22] \$2664.00

[23] \$44.72

[24] 6%

[25] 8%

[26] \$74.73

[27] 20%

[28] \$13

[29] \$7401.22

[30] \$78,147

Math 081 Chapter 9, 10 Review

1. Add: $-5 + 6 + (-6)$

[1] _____

2. Simplify: $-6.8 + (-5.5)$

[2] _____

3. Subtract: $-5.4 - (-3.9)$

[3] _____

4. $-6 - 5 =$

[4] _____

Simplify:

5. $-3.5 - (-6.2) + 3.9$

[5] _____

6. $-(-9) - (-4) + (-3)$

[6] _____

7. The temperature in Duluth, Minnesota, was -21°C at 6 A.M. By noon that day the temperature had risen 18°C . By 6 P.M., the temperature had fallen 17°C . What was the temperature at 6 P.M.?

[7] _____

8. Bobby has \$126 in his checking account. He writes a check for \$111, makes a deposit of \$54, and then writes another check for \$89. Find the amount left in his account. (Write the amount as a signed number.)

[8] _____

9. The highest location in a certain foreign country is 15,010 feet above sea level. The lowest point in the same country is 137 feet below sea level.
a) Find the difference in the two elevations.
b) A city is 8,579 feet above sea level. Is this elevation closer to the highest point or the lowest point?

[9] _____

10. Simplify: $(-10)^2$

[10] _____

11. Evaluate: $(-4.6)(6.3)$

[11] _____

12. Multiply: $\frac{1}{2} \cdot -\frac{7}{8}$

[12] _____

13. Divide: $-16.1 \div 3.5$

[13] _____

14. A deep-sea diver must move up or down in the water in short steps in order to avoid getting a physical condition called the bends. Suppose a diver moves up to the surface in four steps of 13 feet each. Represent her total movement as a product of signed numbers, and find the product.

[14] _____

15. At midnight the temperature is 6°C . If the temperature rises 3°C per hour, what is the temperature at 4 A.M.?

[15] _____

Simplify:

16. $5 - 6 \cdot 5 \div 3 + 7$

[16] _____

17. $38 + 76 \div 19 - 3(-2)$

[17] _____

18. $\frac{5 + 64 \div (-8) - (7)}{-3 - 2}$

[18] _____

19. $3^4 + 8 - 3^2$

[19] _____

20. $-|15| =$

[20] _____

21. What is the mean of the following data?
11, 8, 9, 12

[21] _____

22. Mike was in charge of collecting contributions for the Food Bank. He received contributions of \$30, \$70, \$30, \$120, \$90. The next potential contributor wanted to give an amount in line with the other contributions, so he asked, "What is an acceptable amount to give?" Find the median.

[22] _____

23. Name the mode or modes in the following sample.
12, 20, 23, 5, 2, 10, 10, 16, 8, 9, 12

[23] _____

[1] -5

[2] -12.3

[3] -1.5

[4] -11

[5] 6.6

[6] 10

[7] -20 °C

[8] -\$20

[9] a) 15,147 feet
b) highest

[10] 100

[11] -28.98

[12] $-\frac{7}{16}$

[13] -4.6

[14] (13)(4) = 52, an ascent of 52 feet

[15] 18 °C

[16] 2

[17] 48

[18] 2

[19] 80

[20] -15

[21] 10

[22] \$70

[23] 10, 12