MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Evaluate.

1) $4^5$
   A) 1024  B) 4096  C) 20  D) 625

Multiply.

2) $2630 \times 456$
   A) 1,198,280  B) 1,209,280  C) 1,199,280  D) 1,199,380

Round as indicated.

3) 4012 to the nearest hundred
   A) 4000  B) 3900  C) 4100  D) 4010

Add.

4) 2123 + 2414
   A) 4735  B) 4468  C) 4537  D) 4564

Solve the problem.

5) Mr. and Mrs. Gutierrez borrow $6000 to buy a new car. The loan is to be paid off in 30 monthly payments. How much is each payment?
   A) $200  B) $6030  C) $5970  D) $20

Solve.

6) $z = 20 \cdot 71$
   A) 91  B) 142,000  C) 1420  D) 14,200
Use the given table or graph to write the inequality described.

7) Use an inequality to compare the number of calories in an apple and a bagel.
   A) 80 < 155          B) 155 < 165          C) 80 > 165          D) 80 < 165

Solve the problem.

8) A travel agent arranged a payment plan for a client. It required a down payment of $250 and 15 monthly payments of $582. What was the total cost of the plan?
   A) $8980          B) $8880          C) $8730          D) $8830

Estimate by rounding as indicated.

9) Lisa stashed in an envelope on her dresser $382 each week for 3 weeks. Estimate the total amount she saved by rounding the weekly amount to the nearest hundred. Also find the exact amount she saved.
   A) Estimate: $1140; exact: $1146          B) Estimate: $1140; exact: $1140
   C) Estimate: $1200; exact: $1146          D) Estimate: $1200; exact: $1140

Determine whether the number is prime, composite, or neither.

10) 1
    A) Composite          B) Neither          C) Prime

Multiply.

11) 25 \times \frac{3}{7}
    A) \frac{75}{175}          B) \frac{28}{7}          C) \frac{3}{175}          D) \frac{75}{7}

Determine whether the first number is divisible by the second number.

12) 69; 9
    A) Yes          B) No
Solve.

13) A bag of chips is 24 ounces. A serving size is \(\frac{3}{4}\) ounce. How many servings are in the bag of chips?

A) 32 servings  B) 6\(\frac{3}{4}\) servings  C) 18 servings  D) 9\(\frac{1}{3}\) servings

Multiply.

14) \(\frac{5}{7} \cdot 1\)

A) \(\frac{5}{7}\)  B) 1  C) \(\frac{6}{8}\)  D) \(\frac{6}{7}\)

15) \(\frac{3}{7} \cdot \frac{3}{5}\)

A) \(\frac{3}{35}\)  B) \(\frac{9}{35}\)  C) \(\frac{1}{35}\)  D) \(\frac{6}{12}\)

Solve.

16) Julia preheated her oven for 13 minutes. What fraction of an hour was this? (1 hour = 60 min)

A) \(\frac{13}{60}\) hr  B) \(\frac{12}{60}\) hr  C) \(\frac{13}{18}\) hr  D) \(\frac{60}{13}\) hr

Multiply and simplify.

17) \(\frac{1}{8} \cdot 240\)

A) \(\frac{240}{1920}\)  B) 30  C) 3  D) \(\frac{240}{8}\)

Solve. Write a mixed numeral for the answer.

18) The weight of a certain gas is \(4\frac{1}{2}\) kg per cubic meter. How many cubic meters would be occupied by 90 kg of the gas?

A) \(\frac{1}{20}\) cu m  B) 20 cu m  C) 4050 cu m  D) 22\(\frac{1}{2}\) cu m

Add and simplify.

19) \(\frac{5}{10} + \frac{5}{10}\)

A) \(\frac{10}{10}\)  B) \(\frac{10}{20}\)  C) 1  D) \(\frac{1}{2}\)
Estimate the value as a whole number or as a mixed numeral where the fractional part is \( \frac{1}{2} \).

20) \( 6\frac{1}{7} \)

A) 6        B) 7        C) 6\( \frac{1}{2} \)        D) 8

Solve.

21) A recipe calls for \( \frac{1}{11} \) L of water and \( \frac{5}{11} \) L of milk. If the recipe is doubled, how much liquid will be needed?

A) \( \frac{3}{11} \) L        B) \( \frac{12}{11} \) L        C) \( \frac{6}{11} \) L        D) \( \frac{10}{11} \) L

Add. Write a mixed numeral for the answer.

22) \( 6\frac{4}{5} \)

\[ 20\frac{1}{5} + 6\frac{3}{5} \]

A) \( 34\frac{3}{5} \)        B) \( 32\frac{3}{5} \)        C) 33        D) \( 33\frac{3}{5} \)

Find the average of the set of numbers.

23) \( 6\frac{2}{4} \) and \( 19\frac{7}{8} \)

A) \( 11\frac{5}{8} \)        B) \( 23\frac{1}{4} \)        C) \( 13\frac{3}{16} \)        D) \( 26\frac{3}{8} \)

Add. Write a mixed numeral for the answer.

24) \( 5\frac{1}{4} + 5\frac{3}{8} + 3\frac{5}{12} \)

A) \( 13\frac{1}{24} \)        B) \( 14\frac{1}{24} \)        C) \( 14\frac{1}{96} \)        D) \( 13\frac{3}{8} \)

Calculate.

25) \( 100.75 \div 3\frac{1}{4} \)

A) 35.18        B) 41        C) 30.77        D) 31

Write a word name for the given decimal notation.

26) 9.87

A) Nine and eighty-seven thousandths        B) Nine and eighty-seven millionths
C) Nine and eighty-seven tenths        D) Nine and eighty-seven hundredths
Estimate by rounding as directed.

27) \( 40.401 + 0.582 + 79.99; \) nearest tenth

A) 121.3  
B) 120.1  
C) 121.0  
D) 120.8  

Calculate.

28) \( 7.78 + \frac{3}{5} \)

A) 11.08  
B) 7.78  
C) 11.38  
D) 11.3

Write as a decimal number rounded as indicated.

29) \( \frac{8}{15} \); Round to the nearest tenth.

A) 0.4  
B) 0.3  
C) 0.5  
D) 0.6

Write a word name for the given decimal notation.

30) 6.00374

A) Six and three hundred seventy-four millionths  
B) Six and three hundred seventy-four thousandths  
C) Six and three hundred seventy-four tenths  
D) Six and three hundred seventy-four hundred-thousandths

Solve. Give your answer as a mixed number if appropriate.

31) \( \frac{60}{10} = \frac{12}{n} \)

A) 6  
B) 12  
C) 5  
D) 2

Use a proportion to solve the problem.

32) The ratio of the distances a 7-iron and a 5-iron will drive a golf ball is 5 to 6. If a golfer averages 115 yards with a 7-iron, how far should he average with a 5-iron?

A) 96 yd  
B) 126 yd  
C) 104 yd  
D) 138 yd

Find fractional notation for the ratio. You need not simplify.

33) In this rectangle, find the ratios of length to width and of width to length.

A) \( \frac{155}{258}; \frac{103}{155} \)  
B) \( \frac{258}{155}; \frac{155}{258} \)  
C) \( \frac{103}{155}; \frac{155}{258} \)  
D) \( \frac{155}{258}; \frac{258}{155} \)
Solve. Give your answer as a mixed number if appropriate.

34) \( \frac{21}{24} = \frac{n}{56} \)

A) \( 49\frac{2}{3} \)  
B) 49  
C) \( 49\frac{1}{2} \)  
D) \( 49\frac{1}{4} \)

Determine which purchase has the lower unit price.

35) Brand X: 20 oz for $8.20  
Brand Y: 15 oz for $6.00

A) Brand X  
B) Not enough information  
C) Equal value  
D) Brand Y

36) Brand A: 10 cans for $3.55  
Brand B: 16 cans for $5.01  
Brand C: 26 cans for $7.46  
Brand D: 34 cans for $10.10

A) Brand A  
B) Brand D  
C) Brand B  
D) Brand C

Solve the problem. Round your answer to the nearest cent.

37) Kaitlyn borrowed $16,000 from her mother to buy a car. She will repay the loan at the end of 4 years at 7% interest compounded annually. Find the amount she will repay.

A) $20,972.74  
B) $68,480.00  
C) $4972.74  
D) $23,070.01

Find the simple interest. Round your answer to the nearest cent.

38) Principal = $900  
Interest Rate = \( 7\frac{1}{4} \)%  
Time in months = 14

A) $36.75  
B) $76.12  
C) $761.25  
D) $913.50

Solve the problem. Round your answer to the nearest cent.

39) Andrea Gilford's savings account has a balance of $2395. After 3 years, what will the amount of interest be at 12% compounded quarterly?

A) $1010.70  
B) $1019.70  
C) $143.70  
D) $1024.70

Translate to a proportion and solve.

40) What percent of 24 is 16?

A) 150%  
B) \( 66\frac{2}{3} \)%  
C) \( 33\frac{1}{3} \)%  
D) 65%

Solve the problem.

41) In Little League, Andrew hit 5 home runs in 25 at bats. What percent of the at bats were home runs?

A) 30%  
B) 25%  
C) 20%  
D) 18%
Use the pictograph to answer the question.

42) For selected countries, this pictograph shows approximately how many kilograms of seafood are consumed by each person (per capita) annually.

<table>
<thead>
<tr>
<th>Country</th>
<th>Per Capita Seafood Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟</td>
</tr>
<tr>
<td>Country B</td>
<td>🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 ⟛</td>
</tr>
<tr>
<td>Country C</td>
<td>🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟</td>
</tr>
<tr>
<td>Country D</td>
<td>🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 ⟛</td>
</tr>
<tr>
<td>Country E</td>
<td>🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟 🐟</td>
</tr>
</tbody>
</table>

= 405 kilograms

Approximately how many more kilograms of seafood is eaten per person in Country A than in Country B?

A) 1316.25 kilograms  
B) 1417.5 kilograms  
C) 1012.5 kilograms  
D) 1215 kilograms

Given the grades of a student for one semester, find the grade point average. Assume that the grade point values are 4.0 for an A, 3.0 for a B, and so on. Round to the nearest tenth.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Number of Credit Hours in Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
</tr>
</tbody>
</table>

A) 3.0  
B) 2.0  
C) 9.6  
D) 4.0
The following table contains information about moons orbiting a planet named Geo I. Use the table to solve the problem.

44) | Moon | Average Distance from Geo I (km) | Diameter (km) | Time of Revolution (in Earth time, years) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Luna 1</td>
<td>2000</td>
<td>418</td>
<td>0.50</td>
</tr>
<tr>
<td>Luna 2</td>
<td>2600</td>
<td>2166</td>
<td>1.54</td>
</tr>
<tr>
<td>Luna 3</td>
<td>50,000</td>
<td>308</td>
<td>2.72</td>
</tr>
<tr>
<td>Luna 4</td>
<td>72,000</td>
<td>722</td>
<td>24.35</td>
</tr>
<tr>
<td>Luna 5</td>
<td>165,000</td>
<td>1136</td>
<td>62.70</td>
</tr>
</tbody>
</table>

What is the average time of revolution of the moons?
A) 957.20 years
B) 1.54 years
C) 2.72 years
D) 18.36 years

Use the graph to answer the question.

**Big "D" Sales (2000 – 2001)**

45) Which month in 2001 had the highest sales?
A) Month 12
B) Month 6
C) Month 3
D) Month 5

The following table contains information about moons orbiting a planet named Geo I. Use the table to solve the problem.

46) | Moon | Average Distance from Geo I (km) | Diameter (km) | Time of Revolution (in Earth time, years) |
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Luna 1</td>
<td>2000</td>
<td>414</td>
<td>0.50</td>
</tr>
<tr>
<td>Luna 2</td>
<td>2600</td>
<td>2166</td>
<td>1.54</td>
</tr>
<tr>
<td>Luna 3</td>
<td>80,000</td>
<td>308</td>
<td>2.72</td>
</tr>
<tr>
<td>Luna 4</td>
<td>115,200</td>
<td>722</td>
<td>38.96</td>
</tr>
<tr>
<td>Luna 5</td>
<td>264,000</td>
<td>1136</td>
<td>100.32</td>
</tr>
</tbody>
</table>

Which moon has a diameter of 308 kilometers?
A) Luna 4
B) Luna 3
C) Luna 2
D) Luna 1
Complete.

47) 19 hr = ____ sec 47) _____
A) 6840 B) 68,400 C) 114,000 D) 1140

Convert to Fahrenheit. Use the formula $F = \frac{9}{5}C + 32$ or $F = 1.8C + 32$. Round your answer to the nearest tenth if necessary.

48) 70°C 48) _____
A) 132.4°F B) 70.5°F C) 183.6°F D) 158°F

Use the following information to fill in the blank: 5 mL ≈ 1 tsp, 3 tsp = 1 T.

49) 21 T = ____ mL 49) _____
A) 1.4 B) 105 C) 315 D) 4.2

Complete.

50) 0.931 mL = ____ L 50) _____
A) 0.00931 B) 93.1 C) 931 D) 0.000931

Find the length of the third side of the right triangle. Give an exact answer and, where appropriate, an approximation to three decimal places.

51) 51) _____

A) $c = 14$ cm  B) $c = \sqrt{56}$ cm; $c \approx 7.483$ cm
C) $c = \sqrt{66}$ cm; $c \approx 8.124$ cm  D) $c = \sqrt{106}$ cm; $c \approx 10.296$ cm

Find the perimeter. Use 3.14 for $\pi$.

52) 52) _____

Find the missing angle measure.

53) \[ \begin{align*}
46° & \hspace{1cm} 67° & \hspace{1cm} x \\
\end{align*} \]

A) 67°  
B) 113°  
C) 23°  
D) 46°

Find the length of the third side of the right triangle. Give an exact answer and, where appropriate, an approximation to three decimal places.

54) \[ \begin{align*}
7 \text{ ft} & \hspace{1cm} c \\
11 \text{ ft} & \hspace{1cm} \sqrt{ } \\
\end{align*} \]

A) \[ c = \sqrt{170} \text{ ft}; c \approx 85.0 \text{ ft} \]  
B) \[ c = 170 \text{ ft} \]  
C) \[ c = \sqrt{60} \text{ ft}; c \approx 7.746 \text{ ft} \]  
D) \[ c = \sqrt{170} \text{ ft}; c \approx 13.038 \text{ ft} \]

Solve the problem.

55) By switching service providers, a family’s telephone bill decreased from about $50 a month to about $47. What was the percent of decrease?

A) -7%  
B) 6%  
C) 6.4%  
D) -6%

Multiply.

56) \[ 2.2 \cdot (-7.26) \]

A) -15.972  
B) 9.56  
C) -5.06  
D) 9.46

Find the reciprocal.

57) \[ \frac{11}{10} \]

A) -10  
B) \[ -\frac{11}{10} \]  
C) \[ \frac{10}{11} \]  
D) \[ -\frac{10}{11} \]

Multiply.

58) \[ -6 \cdot (-0.6) \cdot 4 \]

A) -14.4  
B) 144  
C) 14.4  
D) -144

Solve.

59) \[ 9y - 10 = 54 + y \]

A) \[ \frac{32}{5} \]  
B) \[ \frac{22}{5} \]  
C) 8  
D) \[ \frac{11}{2} \]
Solve using the multiplication principle.

60) \(-6.2m = -49.6\)

\[
\begin{array}{cccc}
\text{A)} & 41.6 & \text{B)} & 43.4 & \text{C)} & \frac{1}{8} & \text{D)} & 8 \\
\end{array}
\]

Multiply.

61) \(5(x + 4 + 6y)\)

\[
\begin{array}{cccc}
\text{A)} & 5x + 20 + 6y & \text{B)} & x + 20 + 30y & \text{C)} & 5x + 4 + 6y & \text{D)} & 5x + 20 + 30y \\
\end{array}
\]

Write two related subtraction sentences.

62) \(9 + 21 = 30\)

\[
\begin{array}{cccc}
\text{A)} & 31 - 10 = 21 & \text{and} & 31 - 22 = 9 & \text{B)} & 29 - 8 = 21 & \text{and} & 29 - 20 = 9 \\
\text{C)} & 30 - 9 = 21 & \text{and} & 30 - 21 = 9 & \text{D)} & 30 - 30 = 0 & \text{and} & -30 - (-30) = 0 \\
\end{array}
\]

Subtract.

63) \(787 - 341\)

\[
\begin{array}{cccc}
\text{A)} & 444 & \text{B)} & 346 & \text{C)} & 446 & \text{D)} & 1128 \\
\end{array}
\]

Simplify.

64) \(80 - (27 - 8)\)

\[
\begin{array}{cccc}
\text{A)} & 53 & \text{B)} & 61 & \text{C)} & 19 & \text{D)} & 45 \\
\end{array}
\]

Solve.

65) A company has 37,800 employees. Of these, \(\frac{1}{4}\) drive alone to work, \(\frac{1}{5}\) car pool, \(\frac{1}{6}\) use public transportation, \(\frac{1}{8}\) cycle, and the remainder use other methods of transportation. How many employees use each method of transportation?

\[
\begin{array}{cc}
\text{A)} & \text{Drive alone: 945; car pool: 7560; public transportation: 6300; cycle: 4725; other: 9765} \\
\text{B)} & \text{Drive alone: 9450; car pool: 7560; public transportation: 6300; cycle: 4725; other: 4725} \\
\text{C)} & \text{Drive alone: 9550; car pool: 7560; public transportation: 6200; cycle: 4725; other: 1000} \\
\text{D)} & \text{Drive alone: 9450; car pool: 7560; public transportation: 6300; cycle: 4725; other: 9765} \\
\end{array}
\]

Determine whether the number is prime, composite, or neither.

66) 11

\[
\begin{array}{ccc}
\text{A)} & \text{Neither} & \text{B)} & \text{Prime} & \text{C)} & \text{Composite} \\
\end{array}
\]
Solve and simplify.

67) \( \frac{9}{5} \cdot x = 144 \)

A) 80  
B) 259  
C) 144  
D) 21  

67) _____

Estimate the value as a whole number or as a mixed numeral where the fractional part is \( \frac{1}{2} \).

68) \( \frac{4}{5} + \frac{7}{13} + \frac{10}{19} \)

A) 2 \( \frac{1}{2} \)  
B) 2  
C) 3  
D) 1 \( \frac{1}{2} \)  

68) _____

Divide. Write a mixed numeral for the answer.

69) \( \overline{8} \frac{3}{8} \)

A) 112 \( \frac{3}{8} \)  
B) 112 \( \frac{3}{8} \)  
C) 112 \( \frac{1}{2} \)  
D) 112 \( \frac{1}{2} \)  

69) _____

Use < or > for □ to write a true sentence.

70) \( \frac{14}{11} \bigtriangleup \frac{19}{13} \)

A) <  
B) >  

70) _____

Divide.

71) 3.6 ÷ 0.04

A) 9  
B) 0.9  
C) 90  
D) 0.09  

71) _____

Round to the indicated place value.

72) Round to the nearest hundredth: 0.7013

A) 0.701  
B) 0.7013  
C) 0.71  
D) 0.70  

72) _____

Use a proportion to solve the problem.

73) When a pole 9 \( \frac{1}{2} \) ft high casts a shadow 1 ft long, how long a shadow is cast by a tree 38 ft tall?

A) 4 ft  
B) 5 ft  
C) 4 \( \frac{1}{2} \) ft  
D) 5 \( \frac{1}{4} \) ft  

73) _____

74) On a map of the Thunderbird Country Club golf course, 2.5 inches represent 60 yards. How long is the 18th hole if the map shows 15.5 inches?

A) 9.7 yd  
B) 372 yd  
C) 2325 yd  
D) 930 yd  

74) _____
Solve the problem.

75) Suppose that during the 1990s, the population of a certain country was increasing by 2.1% each year. If the population at the end of 1993 was 6.8 million, what was the population at the end of 1996? Round your answer to the nearest hundredth of a million.

A) 7.23 million  B) 7.24 million  C) 7.09 million  D) 6.94 million

Find decimal notation.

76) $\frac{993}{8}$

A) 9937.5  B) 9.9375  C) 0.99375  D) 0.099375

Refer to the double-bar graph below which shows the number of male and female athletes at a university over a four-year period. Solve the problem.

![Double-bar graph](image)

77) In which year did the greatest difference between the number of male athlete and female athletes occur? Find the difference.

A) 2005; 100 athletes  B) 2005; 150 athletes  C) 2003; 100 athletes  D) 2005; 200 athletes

Use the circle graph to solve the problem.

78) The circle graph below gives the inventory of the men's department of a store.

![Circle graph](image)

In which item of apparel does the store have the smallest investment?

A) Suits  B) Shirts  C) Underwear  D) Socks
Solve.

79) Today is Kurt’s 57th birthday. How many months has he been alive?  
A) 685 mo  B) 570 mo  C) 513 mo  D) 684 mo

Complete.

80) 120 hr = ___ days  
A) 60  B) 5  C) 40  D) 35

Find the perimeter of the polygon.

81)  

2 yd
11 yd
11 yd
2 yd

A) 13 yd  B) 8 yd  C) 26 yd  D) 18 yd

Solve the problem.

82) On January 5, the temperature at a camp site near the arctic circle was 5° Fahrenheit. The temperature dropped 2° F per day for 9 days. What was the temperature on January 14th?  
A) 13°  B) -14°  C) 14°  D) -13°

Collect like terms.

83) 10x - 7y + 13 - 3x - 7 - 4y  
A) -7x - 3y + 6  B) 7x - 3y + 6  C) -7x - 11y + 6  D) 7x - 11y + 6

Simplify.

84) 27(16 - 4 · 3)^2 ÷ (3 · 9)  
A) 4  B) 1296  C) 16  D) 36

Find the reciprocal.

85) \frac{7}{8}  
A) \frac{8}{7}  B) \frac{1}{7}  C) 8  D) \frac{8}{1}

Solve. Write a mixed numeral for the answer.

86) Peter must practice the piano \(\frac{9}{4}\) hours per week. He has already practiced \(\frac{1}{2}\) hours. How many more hours does he need to practice?  
A) 4 hr  B) 3\frac{3}{4} hr  C) 4\frac{3}{4} hr  D) 5\frac{3}{4} hr
Solve the problem.

87) A grocer sold 29 bags of potatoes for $1.35 each. What was the total amount of the sale?  
A) $40.25  
B) $39.15  
C) $39.25  
D) $39.16

Solve. Give your answer as a mixed number if appropriate.

88) \(\frac{x}{22} = \frac{8}{11}\)

A) 32  
B) 4  
C) 16  
D) 30 \(\frac{1}{4}\)

Translate to a proportion and solve.

89) What is \(4\frac{1}{4}\)% of $117,800?

Round to the nearest whole number.

A) 50,070  
B) 294,500  
C) 5007  
D) 2,945,000

The bar graph below shows the number of students by major in the College of Arts and Sciences. Answer the question.

90) The science department is planning to buy some new equipment. They want to make sure that there is one of the new machines for every 5 students majoring in science. If each machine costs $700, how much should they budget for the new equipment?

A) $24,500  
B) $17,500  
C) $21,000  
D) $28,000

Convert to Celsius. Use the formula \(C = \frac{5}{9}(F - 32)\) or \(C = \frac{F - 32}{1.8}\). Round your answer to the nearest tenth if necessary.

91) \(24^\circ F\)

A) 11.2\(^\circ C\)  
B) 75.2\(^\circ C\)  
C) 18.7\(^\circ C\)  
D) -4.4\(^\circ C\)

Approximate to three decimal places.

92) \(\sqrt{600}\)

A) 24.495  
B) 24.494  
C) 24.485  
D) 24.496
Insert < or > to make the statement true.

93) \(-7.3 \quad \_\_\_ 8.2\)
   A) \(-7.3 < 8.2\)         B) \(-7.3 > 8.2\)

Solve using the addition principle.

94) \(m + \frac{3}{4} = -\frac{11}{12}\)
   A) \(-\frac{11}{9}\)         B) \(\frac{5}{3}\)         C) \(-\frac{5}{3}\)         D) \(-\frac{1}{6}\)

Subtract.

95) \(79 - 52\)
   A) 131         B) 23         C) 67         D) 27

What part of the object or set of objects is shaded?

96)

A) \(\frac{7}{8}\)         B) \(\frac{7}{4}\)         C) \(\frac{1}{7}\)         D) \(\frac{7}{1}\)

Multiply. Write a mixed numeral for the answer.

97) \(4\frac{1}{9} \times 1\frac{5}{9}\)
   A) \(6\frac{32}{81}\)         B) \(6\frac{23}{81}\)         C) \(\frac{5}{9}\)         D) \(4\frac{5}{81}\)

Divide the following numbers.

98) \(45 \div 661.5\)
   A) 15.7         B) 147         C) 157         D) 14.7

Determine whether the two pairs of numbers are proportional.

99) 12.56, 3.14 and 3.14, 0.785
   A) No         B) Yes

Translate to an equation and solve.

100) What is \(4\frac{1}{2}\%\) of \$61,200?
    Round to the nearest whole number.
   A) 27,540         B) 1,530,000         C) 2754         D) 153,000
Answer Key  
Testname: ELEMENTARY ALGEBRA TEST 1

1) A  
   Objective: (1.9) b: Evaluate Exponential Notation
2) C  
   Objective: (1.5) a: Multiply Whole Numbers (Multi-Digit
3) A  
   Objective: (1.4) a: Round to Nearest Ten/Hundred
4) C  
   Objective: (1.2) a: Add Two Whole Numbers (Horizontal)
5) A  
   Objective: (1.8) a: Solve Apps: Multiplication/Division of
6) C  
   Objective: (1.7) b: Solve Simple Equation (Variable Alone)
7) D  
   Objective: (1.4) c: Solve Apps: Ordering Whole Numbers
8) A  
   Objective: (1.8) a: Solve Apps: Multiplication/Division of
9) C  
   Objective: (1.5) b: Solve Apps: Estimate Product by
10) B  
    Objective: (2.1) c: Decide If Number Is Prime, Composite,
11)  D  
    Objective: (2.4) a: Multiply Whole Number and Fraction
12) B  
    Objective: (2.1) b: Decide if One Number is Divisible by
13) A  
    Objective: (2.7) d: Solve Apps: Divide Fractions and
14) A  
    Objective: (2.4) a: Multiply Whole Number and Fraction
15) B  
    Objective: (2.4) b: Multiply Fractions
16) A  
    Objective: (2.4) c: Solve Apps: Multiply Fractions
17) B  
    Objective: (2.6) a: Multiply Whole Number and Fraction
18) B  
    Objective: (3.6) c: Solve Apps: Divide Using Mixed
19) C  
    Objective: (3.2) a: Add Two Fractions with Like
20) A  
    Objective: (3.7) b: Estimate Using Mixed Numeral
21) B  
    Objective: (3.2) b: Solve Apps: Add Fractions
22) D  
    Objective: (3.5) a: Add Three Mixed Numerals
23) C  
    Objective: (3.7) a: Find Average of Numbers in Fractional
24) B  
    Objective: (3.5) a: Add Three Mixed Numerals
25) D  
    Objective: (4.5) c: Multiply/Divide Fraction and Decimal
26) D  
    Objective: (4.1) a: Write Word Name Given Decimal
27) C  
    Objective: (4.6) a: Estimate Sum by Rounding to Specified
28) C  
    Objective: (4.5) b: Convert Fraction to Repeating Decimal
29) C  
    Objective: (4.5) b: Convert Fraction to Repeating Decimal
30) D  
    Objective: (4.1) a: Write Word Name Given Decimal
31) D  
    Objective: (5.3) b: Solve Proportion (Whole Numbers)
32) D  
    Objective: (5.4) a: Solve Apps: Solve Proportion I
33) B  
    Objective: (5.1) a: Solve Apps: Find Fraction Notation for
34) B  
    Objective: (5.1) a: Solve Apps: Find Fraction Notation for
35) D  
    Objective: (5.3) b: Solve Proportion (Whole Numbers)
36) D  
    Objective: (5.2) b: Determine Which Purchase Has Lower
37) A  
    Objective: (6.7) b: Solve Apps: Compound Interest
38) B  
    Objective: (6.7) a: Find Simple Interest
39) B  
    Objective: (6.7) b: Solve Apps: Compound Interest
40) B  
    Objective: (6.4) b: Solve Percent Problem for Percent
41) C  
    Objective: (6.5) a: Solve Apps: Solve Percent Problem for
42) A  
    Objective: (7.2) b: Read and Interpret Pictograph
43) A  
    Objective: (7.1) a: Find Grade Point Average
44) D  
    Objective: (7.2) a: Read and Interpret Table
45) A  
    Objective: (7.3) c: Read and Interpret Line Graph
46) B  
    Objective: (7.2) a: Read and Interpret Table
47) B  
Objective: (8.6) a: Convert Between Units of Time  
48) D  
Objective: (8.6) b: Convert from Celsius to Fahrenheit  
49) C  
Objective: (8.5) b: Convert Between Teaspoon,  
50) D  
Objective: (8.5) a: Convert Between Metric Units of  
51) D  
Objective: (9.6) c: Use Pythagorean Theorem (Picture  
52) B  
Objective: (9.3) d: Find Perimeter of Composite Figure  
53) A  
Objective: (9.5) e: Find Missing Angle Measure  
54) D  
Objective: (9.6) c: Use Pythagorean Theorem (Picture  
55) D  
Objective: (10.5) d: Solve Apps: Multiplication and  
56) A  
Objective: (10.4) a: Multiply Signed Decimals  
57) C  
Objective: (10.5) b: Find Reciprocal of Real Number  
58) C  
Objective: (10.4) a: Multiply Signed Decimals  
59) C  
Objective: (11.4) b: Solve Equation by Collecting Like  
60) D  
Objective: (11.3) a: Solve Equation Using Multiplication  
61) D  
Objective: (11.1) b: Use Distributive Laws to Multiply  
62) C  
Objective: (1.3) a: Write Subtraction Sentence Given  
63) C  
Objective: (1.3) b: Subtract Whole Numbers (No  
64) B  
Objective: (1.9) c: Use Order of Operations (Parentheses)  
65) D  
Objective: (2.6) b: Solve Apps: Multiply Fractions and  
66) B  
Objective: (2.1) c: Decide If Number Is Prime, Composite,  
67) A  
Objective: (2.7) c: Solve Equation of Form a*x = b (a,b  
68) B  
Objective: (3.7) b: Estimate Using Mixed Numeral  
69) D  
Objective: (3.4) b: Divide, Writing Answer as Mixed  
70) A  
Objective: (3.3) b: Use Inequality Symbols to Compare  
71) C  
Objective: (4.4) a: Divide Decimal by Decimal  
72) D  
Objective: (4.1) d: Round Decimal to Nearest  
73) A  
Objective: (5.5) a: Solve Apps: Find Length Using Similar  
74) B  
Objective: (5.4) a: Solve Apps: Solve Proportion II  
75) B  
Objective: (6.5) b: Solve Apps: Find Amount Given  
76) C  
Objective: (6.1) b: Convert from Percent to Decimal  
77) B  
Objective: (7.3) a: Read and Interpret Double Bar Graph  
78) D  
Objective: (7.4) a: Read and Interpret Circle Graph  
79) D  
Objective: (8.6) b: Solve Apps: Time and Temperature  
80) B  
Objective: (8.6) a: Convert Between Units of Time  
81) C  
Objective: (9.1) a: Find the Perimeter of a Polygon  
82) D  
Objective: (10.5) d: Solve Apps: Multiplication and  
83) D  
Objective: (11.1) d: Collect Like Terms II  
84) C  
Objective: (1.9) d: Simplify Expression with Nested  
85) A  
Objective: (2.7) a: Find Reciprocal of Number  
86) C  
Objective: (3.5) c: Solve Apps: Add/Subtract Mixed  
87) B  
Objective: (4.7) a: Solve Apps: Multiply Decimals  
88) C  
Objective: (5.3) b: Solve Proportion (Whole Numbers)  
89) C  
Objective: (6.4) b: Solve Percent Problem for Amount II  
90) C  
Objective: (7.3) a: Read and Interpret Bar Graph  
91) D  
Objective: (8.6) b: Convert from Fahrenheit to Celsius  
92) A  
Objective: (9.6) b: Approximate Square Root
Answer Key
Testname: ELEMENTARY ALGEBRA TEST 1

93) A
   Objective: (10.1) d: Determine Which of Two Real

94) C
   Objective: (11.2) a: Solve Equation Using Addition

95) D
   Objective: (1.3) b: Subtract Whole Numbers (No

96) B
   Objective: (2.3) a: Write Fraction for Shaded Part of Object

97) A
   Objective: (3.6) a: Multiply Using Mixed Numerals

98) D
   Objective: (4.4) a: Divide Decimal by Whole Number

99) B
   Objective: (5.3) a: Determine Whether Two Pairs Are

100) C
   Objective: (6.3) b: Solve Percent Problem for Amount II