Fill in the chart.

|  | Meters | Yards | Centimeters | Feet | Inches |
| :--- | :---: | :---: | :---: | :---: | :---: |
| The Height of a Tower |  | 66 |  |  |  |

Give exact answers or round to 1 decimal place.

|  | Meters | Yards | Centimeters | Feet | Inches |
| :--- | :---: | :---: | :---: | :---: | :---: |
| The Height of a Tower | $\square$ | 66 | $\square$ | $\square$ | $\square$ |

2. Complete the table converting percents, decimals, and fractions.

| Percent | Decimal | Fraction |
| :---: | :---: | :---: |
| $40 \%$ |  |  |
|  | 0.965 |  |
|  |  | $\frac{9}{10}$ |
| $42.5 \%$ |  |  |

Complete the table.

| Percent | Decimal | Fraction |
| :---: | :---: | :---: |
| $40 \%$ | $\square$ | $\square$ |
| $\square \%$ | 0.965 | $\square$ |
| $\square \%$ | $\square$ | $\frac{9}{10}$ |
| $42.5 \%$ | $\square$ | $\square$ |

(Simplify your answers.)
3. The screen of a portable digital device is a rectangle that measures 3.5 inches by 2.8 inches. Find the area of the screen.

The area is $\square$ square inches. (Type an integer or a decimal.)
4.

Find the area of the triangle.


The area of the triangle is $\square$ square centimeters.
(Type a whole number or a decimal.)

Choose the correct answer below.A. Three hundred fifty-nine point sixB. Three hundred fifty-nine and six hundredthsC. Three hundred fifty-nine and six thousandthsD. Three hundred fifty-nine and six tenths
6. Marsha Waide borrows $\$ 10,000$ and agrees to pay it back in 5 years. If the simple interest rate is $15 \%$, find the total amount she pays back.

She pays $\$ \square$ back. (Round to the nearest dollar as needed.)
7. If this library has 142,000 books, find how many books are in the category of reference or other?


The number of books in the reference or other category is $\square$ books.
8. Mark Tabbey's recipe for a certain kind of pudding calls for a $360^{\circ} \mathrm{F}$ oven. Find the temperature setting he should use with an oven having Celsius controls.

He should set the oven to $\square$ ${ }^{\circ} \mathrm{C}$.
(Simplify your answer. Round to the nearest tenth as needed.)
9. Simplify.

$$
\frac{6.5+1.4 \times 100-9.3}{0.2}
$$

$\frac{6.5+1.4 \times 100-9.3}{0.2}=\square$ (Type an integer or a decimal.)

Gasoline was $\$ 2.769$ per gallon one week and $\$ 2.989$ per gallon the next. By how much did the price change?
The price of the gasoline changed by $\$$ $\square$
(Simplify your answer. Type a whole number or a decimal.)
11. Determine whether the proportion is a true proportion.

$$
\frac{0.9}{0.2}=\frac{0.2}{0.1}
$$

Choose the correct answer below.

The proportion $\frac{0.9}{0.2}=\frac{0.2}{0.1}$ is a false proportion.
The proportion $\frac{0.9}{0.2}=\frac{0.2}{0.1}$ is a true proportion.
12. A hybrid car averages 603 miles on a 12.7 gallon tank of gas. Manuel is planning a 1280 -mile vacation in his hybrid car. Find how many gallons of gas he can expect to burn.

Manuel needs approximately $\square$ gallons of gas for his vacation.
(Round to the nearest whole number as needed.)
13. Complete the chart.

| Capacity | Cups | Gallons | Quarts | Pints |
| :---: | :---: | :---: | :---: | :---: |
| An average-size bath of water | $?$ | 20 | $?$ | $?$ |

Convert the given quantity of water to the other U.S. units of capacity.

| Capacity | Cups | Gallons | Quarts | Pints |
| :---: | :---: | :---: | :---: | :---: |
| An average-size bath of water | $\square$ | 20 | $\square$ | $\square$ |

14. Complete the table.

| Purchase Price | Tax Rate | Sales Tax | Total Price |
| :---: | :---: | :---: | :---: |
| $\$ 68$ | $5.0 \%$ |  |  |


| Purchase Price | Tax Rate | Sales Tax | Total Price |
| :---: | :---: | :---: | :---: |
| $\$ 68$ | $5.0 \%$ | $\$ \square$ | $\$ \square$ |

Complete the chart.

|  | Meters | Millimeters | Kilometers | Centimeters |
| :--- | :--- | :---: | :---: | :---: |
| Distance from city A to city B |  |  | 330 |  |


|  | Meters | Millimeters | Kilometers | Centimeters |
| :---: | :---: | :---: | :---: | :---: |
| Distance from city A to city B | $\square$ | $\square$ | 330 | $\square$ |

16. Fill in the chart. The first row is completed for you.

| Decimal Number <br> in Standard <br> Form | In Words | Fraction |
| :---: | :---: | :---: |
| 0.37 | thirty-seven hundredths | $\frac{37}{100}$ |
| 0.051 |  |  |


| Decimal Number <br> in Standard <br> Form | In Words | Fraction |
| :---: | :---: | :---: |
| 0.37 | thirty-seven hundredths | $\frac{37}{100}$ |
| 0.051 | $\square$ | $\square$ |

17. Complete the chart.

| Tons | Pounds | Ounces |
| :---: | :---: | :---: |
|  | 1,668 |  |


| Tons | Pounds | Ounces |
| :---: | :---: | :---: |
| $\square$ | 1,668 | $\square$ |

18. What percent of 25 is 40 ?

The answer is $\square$
19.

Find the ratio of the width of this basketball court to its perimeter.


The ratio of the width of this basketball court to its perimeter is $\square$ (Type the ratio as a simplified fraction.)
20. Find each unit price and decide which is the better buy. Assume that we are comparing different sizes of the same brand.

Crackers:
$\$ 1.29$ for 6 ounces
$\$ 1.49$ for 8 ounces
The unit price for the 6 -ounce package is approximately $\$ \square$ per ounce.
(Round to three decimal places as needed.)
The unit price for the 8 -ounce package is approximately $\$ \square$ per ounce.
(Round to three decimal places as needed.)
Which is the better buy?

- 8-ounce package

6-ounce package
21. The top face of a music player measures 4.7 inches by 4.0 inches. Find the perimeter of the rectangular face.


The answer is $\square$ inches.
22. The U.S.-based motorcycle manufacturer says that it expects to build 143,000 motorcycles this year, up from 133,000 last year. Find the percent of increase in production.

The percent of increase is $\square$
(Round to the nearest tenth of a percent.)

The answer is $\square$
(Type an integer or a decimal. Round to the nearest tenth.)
24. Complete the chart.

| Grams | Kilograms | Milligrams | Centigrams |
| :---: | :---: | :---: | :---: |
|  |  | 130 |  |


| Grams | Kilograms | Milligrams | Centigrams |
| :---: | :---: | :---: | :---: |
| $\square$ | $\square$ | 130 | $\square$ |

25. Write the list of numbers in order from smallest to largest.

$$
\frac{5}{4}, 1.38, \frac{15}{8}
$$

The numbers from smallest to largest are $\square$ .믄․ $\square$
26. Complete the table.

| Sale | Commission Rate | Commission |
| :---: | :---: | :---: |
| $\$ 359,600$ | $4 \%$ | $?$ |

Fill in the table below.

| Sale | Commission Rate | Commission |
| :---: | :---: | :---: |
| $\$ 359,600$ | $4 \%$ | $\$ \square$ |

(Simplify your answer. Type an integer or a decimal.)
27. Convert as indicated.
34.5 liters to gallons
$34.5 \mathrm{~L} \approx$ $\square$ gal (Round to two decimal places as needed.)

The line graph to the right shows the total points scored by both teams in a championship game from 2003 through 2009. During which of the years shown were the total points scored in the game greater than 60 ?


During the year(s) $\square$, there was a total of more than 60 points scored in the championship game. (Use a comma to separate answers as needed.)
29. Round to the nearest hundredth.

$$
30.424
$$

The answer is $\square$
30. People drive, on average, 13,100 miles per year. About how many miles each week is that?

People drive about $\square$ miles each week.
(Round to the nearest tenth as needed.)
31. Complete the chart.

|  | Yards | Feet | Inches |
| :---: | :---: | :---: | :---: |
| Python length |  | 35 |  |


|  | Yards | Feet | Inches |
| :---: | :---: | :---: | :---: |
| Python length | $\square$ | 35 | $\square$ |

(Simplify your answers.)


| 12. | 27 |
| :---: | :---: |
| 13. | 320 |
|  | 80 |
|  | 160 |
| 14. | 3.40 |
|  | 71.40 |
| 15. | 330,000 |
|  | 330,000,000 |
|  | 33,000,000 |
| 16. | fifty - one thousandths |
|  | 51 |
|  | 1000 |
| 17. | 0.834 |
|  | 26,688 |
| 18. | 160 |
| 19 | 1 |
|  | 10 |
| 20 | 0.215 |
|  | 0.186 |
|  | the first choice |
| 21. | 17.4 |
| 22. | 7.5 |
| 23 | 140 |
| 24 | 0.13 |
|  | 0.00013 |
|  | 13 |


| 25. | $\frac{5}{4}$ |
| :--- | :--- |
|  | $\frac{1.38}{8}$ |
| 26. | 14,384 |
| 27. | 8.97 |
| 28. | 2003,2005 |
| 29. | 30.42 |
| 30. | 251.9 |
| 31. | $41 \frac{2}{3}$ |

