# Students Entering 

## Sixth Grade

## Summer Math Packet

Adding and Subtracting Decimals
Find $1.7+2.45$.
Find 36.57-4.6.

| Line up the decimal points. | Line up the decimal points. |
| :---: | :---: |
| $1{ }^{1}$ | 515 |
| $1.7 \quad 1.70$ - Write zeros to | $36.57 \quad 36.57$ Write zeros to |
| +2.45 +2.45 show place value. | $-4.6-4.60$ - show place value. |
| 4.15 | 31.97 |
| $\uparrow$ Place decimal point in answer. | $\uparrow$ Place decimal point in answer. |

Find each sum or difference.

1. 2.65
+13.30

+ 

5. 8.97 $+66$
6. 14.10
$-\quad 3.05$
7. 744
$\begin{array}{r} \\ +\quad 36.2 \\ \hline\end{array}$
8. 9
$-0.6$
9. 100
$-\quad 0.22$
10. 6.8 $+237.29$
11. 0.5
$-0.23$
12. $15.4-8=$ $\qquad$ 10. $3-2.54=$ $\qquad$
13. $1.34+4.1=$ $\qquad$
14. $448+1.75+80.3=$ $\qquad$
15. $12.3+0.61+100=$ $\qquad$
16. $133.01-5.6=$ $\qquad$
17. On the 3-days of their vacation, the Davis family traveled $417 \mathrm{mi}, 45.3 \mathrm{mi}$, and 366.9 mi . How far did they travel all together?
18. Etta bought a calculator for $\$ 15$. Glenn found the same model for $\$ 9.79$. How much more did Etta. pay than Glenn did?
$\qquad$

1) 

Find $4.3 \times 2.7$.

| Multiply as you would <br> with whole numbers. | Count the number of decimal places in both factors. <br> The total is the number of decimal places in the product. |
| :---: | :---: |
| 2 |  |
| 4.3 |  <br> $\times 2.3$ <br> 301 |
| $\frac{860}{1161}$ | $\frac{1 \text { decimal place }}{11.61 \div+1 \text { decimal place }}$ |

Find each product.

1. 14
8.8
$\times 112$
1120
2. 1.6
$\begin{array}{r}1 \\ \times \quad 9 \\ \hline\end{array}$
3. $\begin{array}{r}0.4 \\ \times 3.2 \\ \hline\end{array}$
4. $\begin{array}{r}0.05 \\ \times \quad 0.3 \\ \hline\end{array}$
D))
5. $\begin{array}{r}2.15 \\ \times \quad 8.3 \\ \hline\end{array}$
6. 

$\begin{array}{r}3.3 \\ \times 0.12 \\ \hline\end{array}$
7. 0.51
$\begin{array}{r}4.2 \\ \times \quad 4 \\ \hline\end{array}$
8.
$\begin{array}{r}1.35 \\ \times \quad 13 \\ \hline\end{array}$
9. $23 \times 0.47=$ $\qquad$ 10. $0.9 \times 5=$
11. $168 \times 2.25=$ $\qquad$
12. $0.8 \times 0.11=$ $\qquad$ 13. $20 \times 20.2=$ $\qquad$
14. $4.9 \times 0.3=$ $\qquad$
15. A roll of paper towels contained 250 sheets.

Each sheet was 8.75 inches long. How long was the roll?
16. Tania bought 3 new sweaters. Each sold for $\$ 19.99$.

How much did she spend?
$\qquad$

## Dividing with Decimals

Find $36.8 \div 16$.


Find each quotient.

1. $6 \longdiv { 1 3 . 8 }$

2. $6 \longdiv { 1 3 1 . 4 }$
3. $9 \longdiv { 1 4 1 . 3 }$
4. $5 \longdiv { 3 8 8 . 5 }$
5. 1
6. 9) 141.3
1. $7 \longdiv { 6 . 6 9 . 2 }$
2. $2 8 \longdiv { 2 6 3 . 2 }$
3. $4 1 \longdiv { 2 7 4 . 7 }$
4. $7 \longdiv { 3 4 . 2 3 }$
5. $269.12 \div 8=$ $\qquad$ 10. $311.56 \div 4=$
6. $2,229.62 \div 46=$ $\qquad$ 12. $1,449.09 \div 81=$ $\qquad$
7. A photographer bought 36 rolls of film for $\$ 136.44$. What was the price of one roll?
8. Four students each ran 100 m in a $400-\mathrm{m}$ relay race. The team's total time was 49.44 sec . Find the average time of each rünner.

## Interpreting Data

## Review

The bar graph shows the lengths in miles of the Great Lakes. Lengths of bars represent lengths of lakes.

Which is the shortest Great Lake?
The shortest lake is Lake Ontario.


Use the graphs to answer each question.

1. How many archers scored 4 buli's eyes?
$\qquad$
2. What was the most common number of bull's-eyes scored?


3. Which grades raised about the same amount for the school book drive?
4. In which month were the most houses sold?
$\qquad$
5. In which month were about the same number sold as were soid in Augusti?
$\qquad$
6. The school's goal was to raise $\$ 1,500$.
About how much did they raise in all? The school's goal was to raise $\$ 1,500$.
About how much did they raise in all?
$\qquad$

$\qquad$

## Perimeter

Perimeter is the distance around a shape.

$$
\begin{aligned}
& \text { You can add the lengths of all the sides } \\
& \text { or you can multiply the sum of the } \\
& \text { length and the width by } 2 \text { to find the } \\
& \text { perimeter of a rectangle. } \\
& \qquad 9 \mathrm{in} . \\
& 25 \mathrm{in} \text {. } \\
& p=25 \mathrm{in} .+9 \mathrm{in} .+25 \mathrm{in} .+9 \mathrm{in} .=68 \mathrm{in} \text {. } \\
& \text { or } p=2 \times(25 \mathrm{in} .+9 \mathrm{in} .)=68 \mathrm{in} \text {. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { If only one side of a figure is given, } \\
& \text { then all sides have the same length. } \\
& p=5 \mathrm{~cm}+5 \mathrm{~cm}+5 \mathrm{~cm}+5 \mathrm{~cm}=20 \mathrm{~cm} \\
& \text { or } p=4 \times 5 \mathrm{~cm}=20 \mathrm{~cm}
\end{aligned}
$$

2. Find the perimeter of the square.


3 in.

$p=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$ m
$p=$ $\qquad$ $\times$ $\qquad$ $=$ $\qquad$ in.

Find the perimeter of each figure.
3.

4.

5.

6.

7.

8.

9.

10.

11. A flower garden is in the shape of an equilateral triangle. Each side measures $15 \frac{3}{8} \mathrm{ft}$. What is the garden's perimeter?

$\qquad$

## Area of Squares and Rectangles

You can use formulas to find the area of a square or rectangle.
Find the area of a square that is 7.2 m on Find the area of a rectangle with a length each side.

Use the formula $A=s^{2}$.
Use the formula $A=I \times W$.

$$
\begin{aligned}
& A=(7.2)^{2} \\
& A=51.84
\end{aligned}
$$

$$
\begin{aligned}
& A=4 \times 12 \\
& A=48
\end{aligned}
$$

The area is $51.84 \mathrm{~m}^{2}$.
The area is $48 \mathrm{~cm}^{2}$.

Find the area of each figure.
1.

2.

3.

4.

5. Reasoning What is the length of a rectangle that has an area of $120 \mathrm{ft}^{2}$ and a width of 8 ft ?
6. Number Sense What is the area of a square that is 12.4 cm on each side?

Name $\qquad$

## Fractions, Decimals, and Percents

Fractions, decimals, and percents all name parts of a whole. The grid to the right has 72 out of 100 squares shaded.
72 out of 100 are shaded. As a fraction; that is $\frac{72}{100}$.
As a decimal, that is 0.72 . As a percent, that is $72 \%$.


Write $40 \%$ as a fraction and decimal.
$40 \%=\frac{40}{100}=0.40$
The decimal point moves two places to the left.

Write 0.47 as a fraction and percent.
$0.47=\frac{47}{100}=47 \%$

Write $0.3 \%$ as a fraction and decimal.
$0.3 \%=\frac{0.3}{100}=0.003$
The decimal point moves two places to the left. Fill in any spaces with zeros.

Write $\frac{3}{4}$ as a decimal and percent.
You can use a proportion:

$$
\begin{aligned}
& \frac{3}{4}=\frac{n}{100} \\
& \frac{4 n}{4}=\frac{300}{4} \\
& n=75 \\
& \text { So, } \frac{3}{4}=0.75=75 \% .
\end{aligned}
$$

Write each in two other ways.

1. $\frac{2}{10}$ $\qquad$ 2. $\frac{23}{100}$ $\qquad$ ; $\qquad$
2. $\frac{7}{10}$ $\qquad$ 4. $97 \%$ $\qquad$ ; $\qquad$
3. $16 \%$ $\qquad$ 6. $52 \%$ $\qquad$ ;
4. 0.04 $\qquad$ ;
5. 0.35 $\qquad$ ; $\qquad$
6. Number Sense Sheila got $87 \%$ of the problem correct.

Patrick got $\frac{91}{100}$ correct. Who scored higher?

