# 5TH GRADE SUMMER HOMEWORK

**NAME:** _____

# WELCOME TO 5TH GRADE!

I am looking forward to getting to know you! In this packet you will find many things:

## Supply List

Attached is a list of supplies that you will use in 5th grade. Please label all of your supplies with your name or initials. Thank you for your generosity!

## Reading Work

I encourage you to read a variety of books this summer. Make sure you read both fiction and non-fiction books. Also:

- Complete one reading project and be prepared to share it on the first day of school.
- Record the books that you read on the bookshelf reading log provided. You do not need to fill the entire shelf.

## Math Work
### (if you are in my math class)

The most important math work you can do over the summer is practice your facts - especially multiplication and division. You can use whatever works best for you - flash cards, workbooks, or apps. You should know your facts well before the start of the year. The math we will be doing will be much easier if you know your facts. Also:

- Complete math packet.

All work is due on the first day of school. If you have any questions, please feel free to email me.

Have a wonderful summer! I look forward to seeing you in 5th grade!
Mrs. Glaser
nglaser@stisidoreschool.com

# Supply List

## Personal Supplies

- ❏ Pencils
- ❏ Erasers
- ❏ Black Sharpie
- ❏ Highlighter
- ❏ Glue stick
- ❏ White liquid glue
- ❏ Crayons or colored pencils
- ❏ Markers
- ❏ Ruler
- ❏ Scissors
- ❏ Pencil case
- ❏ 7 Folders - label: "Take Home" "ELA" "Math" "Social Studies and Science" "Tests" "Library and Computer" "Spanish and Music"
- ❏ One plastic folder with prongs
- ❏ Two 3 subject notebooks - label: "ELA and Specials" "Science, Social Studies, and Religion"
- ❏ If you are with me for math:
    - ❏ 2 whiteboard markers
    - ❏ Whiteboard eraser
    - ❏ A jumbo "book sock" to cover your math textbook
    - ❏ A 3 subject notebook
- ❏ Supplies for art in a gallon bag (watercolor set, box of 24 crayons, smock)
- ❏ Headphones for computer in a gallon bag
- ❏ Contact paper **this should stay at home to cover books**

## Classroom Supplies

- ❏ 1 pack of lined notebook paper (boys)
- ❏ 1 pack of white lined index cards (girls)
- ❏ 3 boxes of tissues
- ❏ 2 rolls of paper towels
- ❏ Sandwich bags (girls)
- ❏ Gallon bags (boys)

# Reading Projects

Using one of the books you read this summer, complete <u>one</u> of the following projects.

- **"Who am I?" Riddle**- Create a list of 10-12 facts that would describe a character or a significant person from the book you read. Your riddle facts should show a clear understanding of the character.

- **Comic Strip** - Create a comic strip illustrating the sequence of main events in your book. There should be 6 to 8 panels (boxes) with appropriate dialogue. Your comic strip should show a clear understanding of the plot.

- **Timeline** - Create a timeline of 10 to 15 dates for a major event in history or for the life of a significant person you read about. Use pictures and words. Your timeline should look neat and organized.

You should be prepared to present your project on the first day of school.
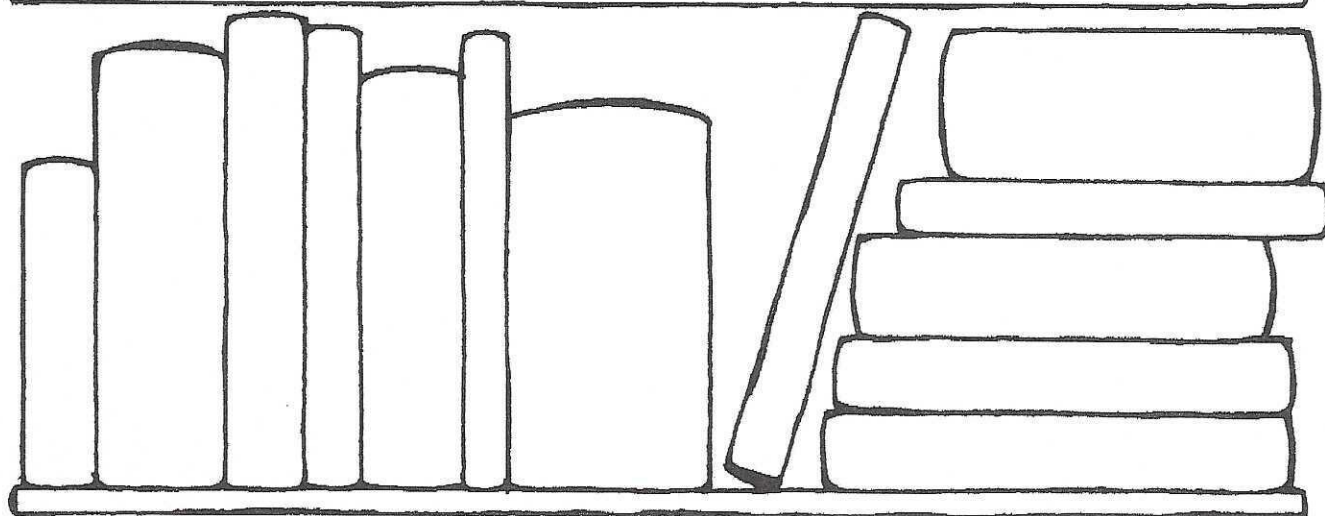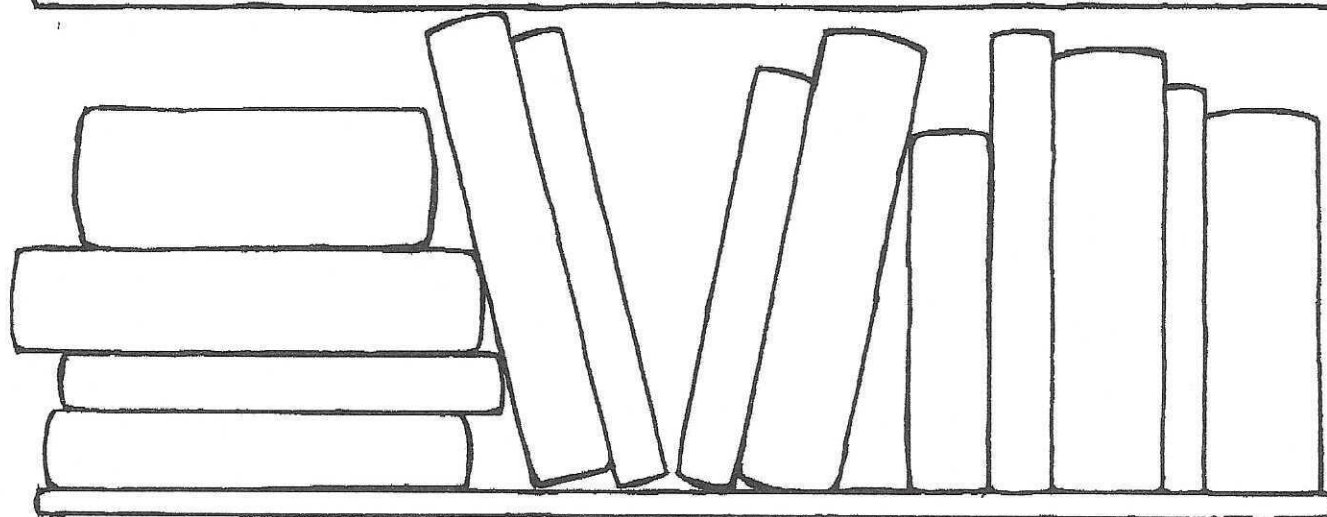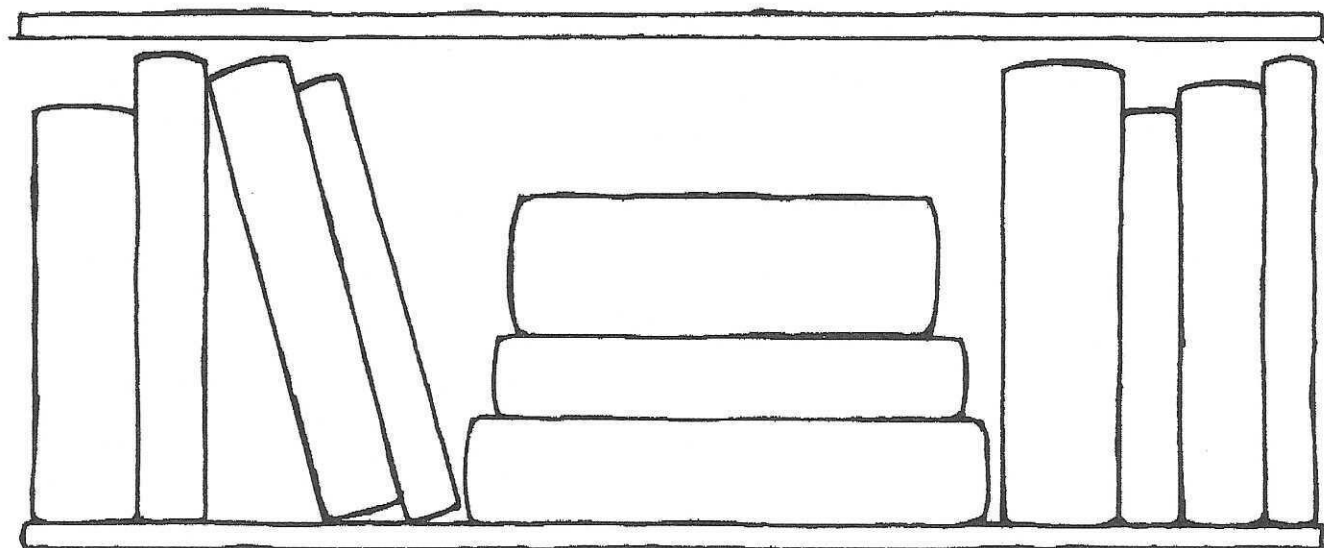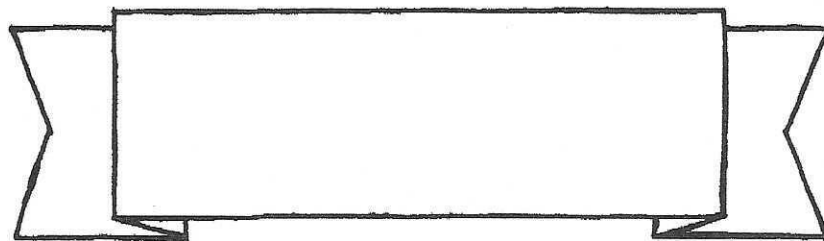
# Adding Whole Numbers

1. Write the problem vertically, lining up the numbers to the right.

2. Add the ones digits of the numbers. If the sum is 10 or more, carry the tens digit and write the ones digit in the answer.

3. Repeat with the tens digits. Be sure to add in any carried digits, too!

4. Continue working right to left until there are no more digits to add.

ex: 5,938 + 746

$$\begin{array}{r} \overset{1}{5}\overset{1}{9}\overset{1}{3}8 \\ + \phantom{0}746 \\ \hline 6684 \end{array}$$

→ 6,684

# Subtracting Whole Numbers

1. Write the problem vertically, lining up the numbers to the right.

2. Subtract the ones digits of the numbers. If the top digit is less than the bottom digit, borrow. (Cross out the digit next to it and decrease it by one. Add 10 to the ones digit.) Then subtract the bottom digit from the new top one.

3. Repeat with the tens digits of the numbers.

4. Continue working right to left until there are no more digits to subtract.

ex: 458 - 268

$$\begin{array}{r} \overset{3}{\cancel{4}}\overset{15}{5}8 \\ - \phantom{0}268 \\ \hline 190 \end{array}$$

→ 190

# Rounding Whole Numbers

| hundred-thousands | ten-thousands | thousands | , | hundreds | tens | ones |
|---|---|---|---|---|---|---|
| — | — | — | | — | — | — |

1. Keep all digits to the left of the place you are rounding the same.

2. If the digit to the right of the rounding digit is less than 5, keep the rounding digit the same. If it's 5 or greater, increase the rounding digit by 1.

3. Change all places to the right of the digit you are rounding to 0.

ex: round 34,647 to the nearest hundred

The 6 is in the hundreds place.

Keep the 34 the same.

After the 6 is a 4, which is less than 5, so the 6 stays the same and the numbers after it turn to zeroes.

→ 34,600

Find each sum or difference.

| | | |
|---|---|---|
| 1.  89 + 74 | 2.  627 + 913 | 3.  723 + 11 |
| 4.  2,354 + 3,728 | 5.  1,925 + 89 | 6.  7,627 + 836 |
| 7.  53 − 31 | 8.  682 − 426 | 9.  844 − 79 |
| 10.  2,365 − 1,299 | 11.  3,014 − 45 | 12.  5,200 − 845 |

Round the number 245,382 to the nearest given place value.

| 13.  hundred | 14.  ten-thousand | 15.  thousand | 16.  ten |
|---|---|---|---|
| | | | |

# Multiplying by 1-Digit Numbers

1. Write the problem vertically, with the greater number on top. Be sure to line up the numbers to the right.

2. Multiply the bottom number by the ones digit of the top number. Write down the ones digit of that answer and carry the tens digit.

3. Multiply the bottom number by the tens digit of the top number. If you carried a digit from the first product, be sure to add it to you your new product. Write down the ones digit of the answer and carry the tens digit.

4. Repeat with any remaining digits of the top number, working right to left.

ex: 892 x 6

$$\begin{array}{r} {}^{5\ 1}892 \\ \times\ \ \ 6 \\ \hline 5352 \end{array}$$

→ 5,352

# Multiplying Two 2-Digit Numbers

1. Write the problem vertically. Be sure to line up the numbers to the right.

2. Multiply the ones digit of the bottom number by each digit of the top number, right to left, (as explained in the multiplying by 1-digit numbers section above).

3. Bring down a zero.

4. Multiply the tens digit of the bottom number by each digit of the top number, right to left, (as explained in the multiplying by 1-digit numbers section above).

5. Add the two products together to get your final answer.

ex: 76 x 24

$$\begin{array}{r} {}^{1}_{2}76 \\ \times\ 24 \\ \hline 304 \\ +\ 1520 \\ \hline 1824 \end{array}$$

→ 1,824

5x7=
19+21=
35÷7=
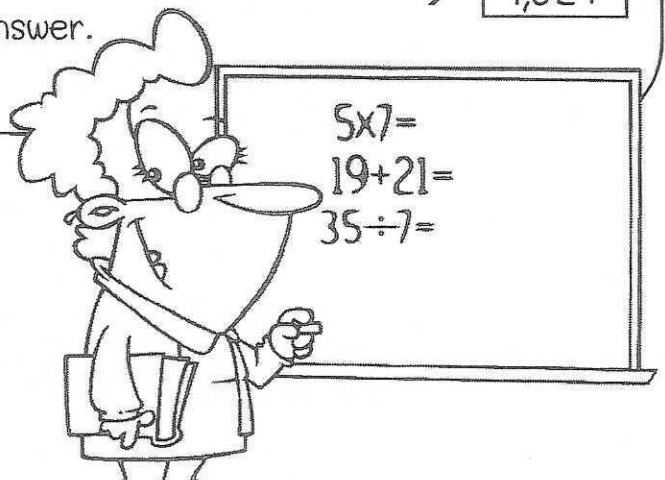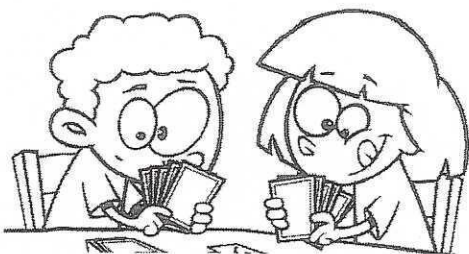
Find each product.

| | | |
|---|---|---|
| 17. 24 x 7 | 18. 96 x 3 | 19. 57 x 2 |
| 20. 845 x 5 | 21. 910 x 8 | 22. 341 x 6 |
| 23. 1,387 x 4 | 24. 8,452 x 9 | 25. 5,023 x 8 |
| 26. 34 x 21 | 27. 84 x 13 | 28. 95 x 64 |
| 29. 32 x 20 | 30. 67 x 89 | 31. 72 x 44 |

# Dividing with 1-Digit Divisors

1. Write out the long division problem with the first number (dividend) underneath the division symbol and the second number (divisor) to the left of the division symbol.

2. Divide the divisor into the smallest part of the dividend it can go into and write the number of times it can go in on top of the division symbol.

3. Multiply the number on top by the divisor and write the product under the number you divided into in step 2.

4. Subtract your product from the number above it.

5. Bring down the next digit of the dividend.

6. Repeat steps 2-5 until there is nothing left to bring down.

7. If your last subtraction answer is not zero, write the remainder on top.

ex: $6,413 \div 9$

```
        7 1 2  R 5
     _____
  9 ) 6 4 1 3
     -63 ↓
       1 1 ↓
      - 9 ↓
       23
     - 18
        5
```
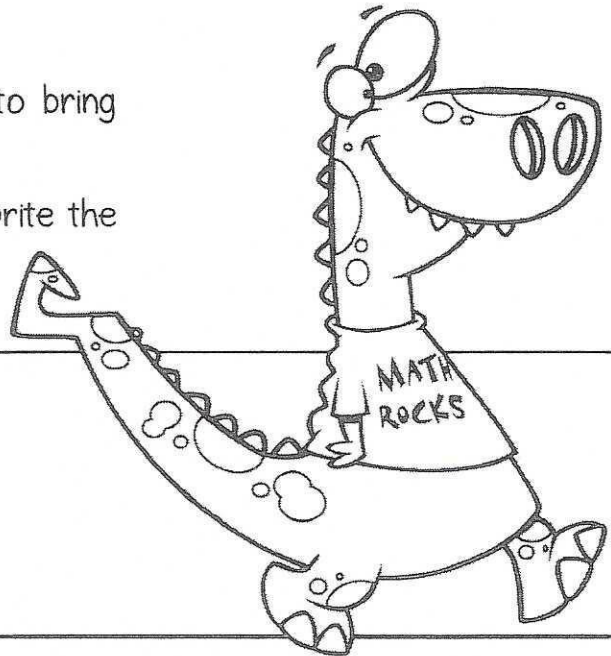
# Checking Division Answers Using Multiplication

1. Multiply your quotient (not including the remainder) by the divisor.

2. Add your remainder to the product you get.

3. Make sure the answer you get is the same number as the dividend in the original problem.

ex: $6,413 \div 9 = 712$ R 5

```
    7 1 2
  x     9
  _____
  6 4 0 8
```

```
  6408
 +   5
 _____
  6413
```

Find each quotient.  Check your answers using multiplication.

| | | |
|---|---|---|
| 32.  95 ÷ 6 | 33.  58 ÷ 2 | 34.  86 ÷ 3 |
| 35.  232 ÷ 4 | 36.  512 ÷ 7 | 37.  203 ÷ 8 |
| 38.  625 ÷ 5 | 39.  442 ÷ 9 | 40.  102 ÷ 3 |
| 41.  2,304 ÷ 6 | 42.  1,832 ÷ 7 | 43.  9,203 ÷ 8 |

# Greatest Common Factor

Factors are numbers that can be multiplied together to equal a given number.

To find the greatest common factor (GCF) of 2 or more numbers:

1. List all the factors of each number.

2. Find the largest number that is a factor of each number.

ex: find the GCF of
    12 & 15

12 = 1 x 12, 2 x 6, 3 x 4

12:  1, 2, ③, 4, 6, 12

15 = 1 x 15, 3 x 5

15:  1, ③ 5, 15

$\boxed{GCF = 3}$

# Least Common Multiple

Multiples are numbers that can be divided by a given number without a remainder.

To find the least common multiple (LCM) of 2 or more numbers:

1. List the first several multiples of each number.

2. Find the smallest number that is a multiple of each number.

ex: find the LCM of
    6 & 8

6:  6, 12, 18, ㉔, 30

8:  8, 16, ㉔, 32, 40

$\boxed{LCM = 24}$

$27-14=$   $42 \div 6=$
$5 \times 3=$
$1/2+3/4=$
$10 \div 4=$   $10 \times 7=$
$12^2=$
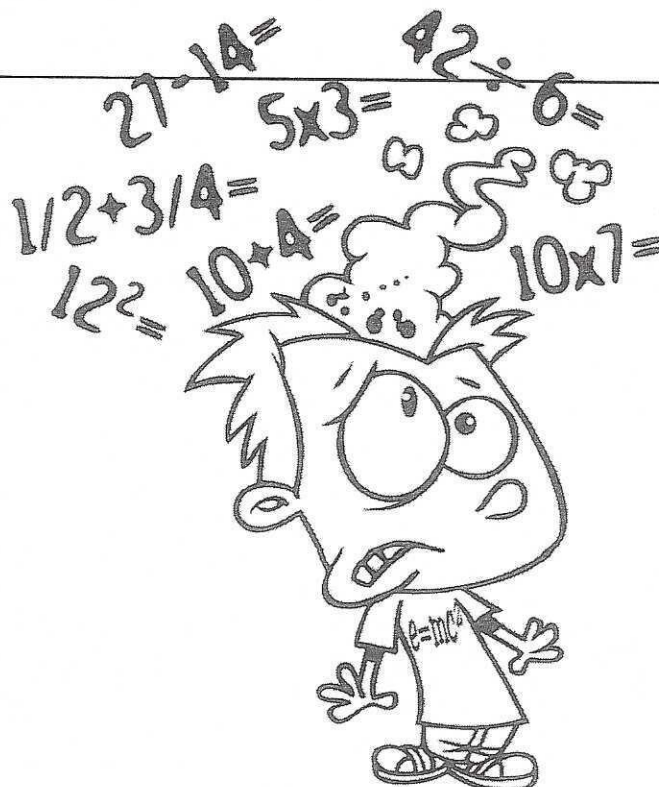
Find the greatest common factor of each pair or group of numbers.

| 44.  20 & 15 | 45.  12 & 18 | 46.  24 & 30 | 47.  22 & 28 |
|---|---|---|---|
| 48.  20 & 40 | 49.  18 & 27 | 50.  6, 8, & 12 | 51.  12, 18, & 24 |

Find the least common multiple of each pair or group of numbers

| 52.  8 & 10 | 53.  9 & 6 | 54.  8 & 12 | 55.  7 & 8 |
|---|---|---|---|
| 56.  9 & 12 | 57.  10 & 15 | 58.  6, 9, & 12 | 59.  4, 6, & 10 |

# Simplifying Fractions

1. Divide the numerator and denominator by a common factor.

2. Repeat until the only common factor of the numerator and denominator is 1.

ex: simplify $\frac{10}{12}$

you can divide both 10 and 12 by 2

$$\frac{10}{12} \begin{array}{c} \div 2 \\ = \\ \div 2 \end{array} \boxed{\frac{5}{6}}$$

the only number you can divide both 5 and 6 by is 1, so you are done!

# Comparing Fractions

1. Find a common denominator for the fractions by finding a common multiple of the two denominators.

2. For each fraction, determine what you multiplied the denominator by to get that common denominator, and then multiply the numerator by that same number.

3. Now that the fractions are rewritten with common denominators, compare the two fractions. The fraction with the larger numerator is greater.

4. Use the appropriate symbol to compare the fractions.
   <: less than,    >: greater than,    =: equal to

ex: compare: $\frac{3}{4} \bigcirc \frac{5}{6}$

12 is a multiple of both 4 and 6

$$\frac{3}{4} \begin{array}{c} \times 3 \\ = \\ \times 3 \end{array} \frac{9}{12} \qquad \frac{5}{6} \begin{array}{c} \times 2 \\ = \\ \times 2 \end{array} \frac{10}{12}$$

$$\frac{9}{12} \;\bigcirc\!\!<\; \frac{10}{12}$$

9 is smaller than 10, so the 1st fraction is LESS THAN the 2nd fraction
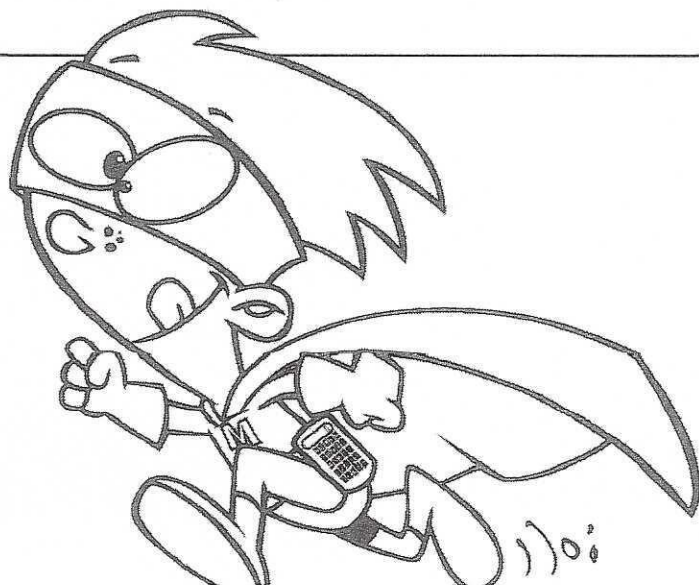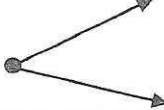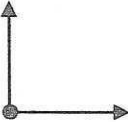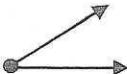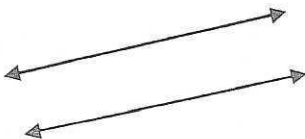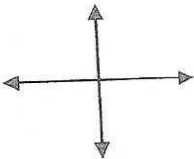
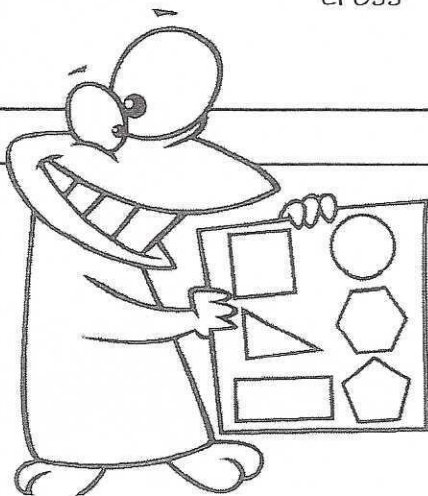Simplify each fraction.

| | | | |
|---|---|---|---|
| 60. $\frac{9}{12}$ | 61. $\frac{6}{8}$ | 62. $\frac{6}{15}$ | 63. $\frac{4}{8}$ |
| 64. $\frac{8}{24}$ | 65. $\frac{3}{12}$ | 66. $\frac{2}{10}$ | 67. $\frac{10}{30}$ |

Compare each pair of fractions using <, >, or = by renaming them with a common denominator.
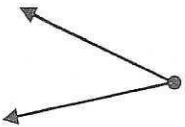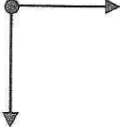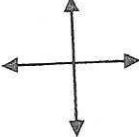
| | | |
|---|---|---|
| 68. $\frac{3}{5}$ $\bigcirc$ $\frac{2}{10}$ | 69. $\frac{1}{4}$ $\bigcirc$ $\frac{1}{6}$ | 70. $\frac{3}{5}$ $\bigcirc$ $\frac{7}{10}$ |
| 71. $\frac{1}{2}$ $\bigcirc$ $\frac{4}{8}$ | 72. $\frac{1}{5}$ $\bigcirc$ $\frac{4}{15}$ | 73. $\frac{2}{9}$ $\bigcirc$ $\frac{1}{3}$ |
| 74. $\frac{7}{8}$ $\bigcirc$ $\frac{3}{4}$ | 75. $\frac{3}{9}$ $\bigcirc$ $\frac{2}{6}$ | 76. $\frac{1}{2}$ $\bigcirc$ $\frac{1}{3}$ |

# Geometric Figures

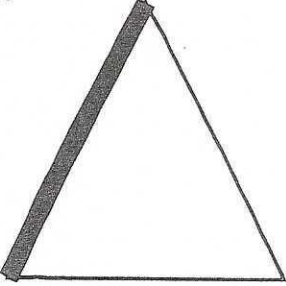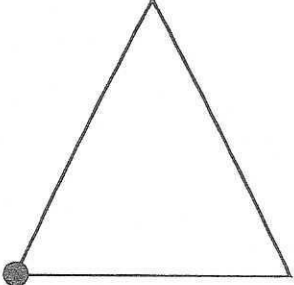| | |
|---|---|
| <u>Point</u>: a location |  |
| <u>Line</u>: a straight line made up of points that extends forever in both directions |  |
| <u>Line Segment</u>: a part of a line with two endpoints |  |
| <u>Ray</u>: a part of a line with one endpoint that extends forever in one direction |  |
| <u>Angle</u>: two rays with a common endpoint |  |
| <u>Right Angle</u>: an angle with a measure of 90° |  |
| <u>Acute Angle</u>: an angle with a measure less than 90° |  |
| <u>Obtuse Angle</u>: an angle with a measure greater than 90° |  |
| <u>Parallel Lines</u>: lines that never meet and are always the same distance apart |  |
| <u>Perpendicular Lines</u>: lines that form right angles where they cross |  |
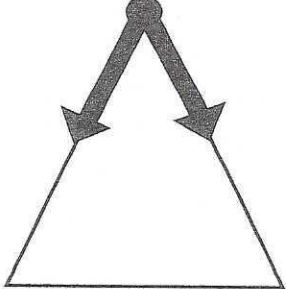
Identify each geometric figure.

| | | | |
|---|---|---|---|
| 77. | 78. | 79. | 80. |
| 81. | 82. | 83. | 84. |

Draw your own example of each geometric figure.

| 85. obtuse angle | 86. ray | 87. acute angle | 88. parallel lines |
|---|---|---|---|
| | | | |

Use a geometry term to identify the bold part of each triangle.

| 89. | 90. | 91. |
|---|---|---|
| | | |

Solve each word problem.

| | | |
|---|---|---|
| 92. Tina left her house at 6:45 AM. She came home at 1:35 PM. How long was she out of the house? | 93. Greg made $18 per hour doing yardwork. If he worked for 6 hours, how much money did he make? | 94. Mrs. Appleton baked 24 cookies. If she split the cookies evenly among her 5 children, how many cookies did each child get? How many cookies were leftover? |
| 95. If Tyler is currently 51 inches tall, how many inches more does he need to grow to be 5 feet tall? | 96. 24 out of the 30 students in Mr. Willow's class ride the bus to school. What fraction of the class does not ride the bus? Express your answer in simplest form. | 97. Xavier played video games for 1 hour and 45 minutes before he went to bed. If he went to bed at 9:00 PM, what time did he start playing video games? |
| 98. Hot dogs come in packages of 12. Hot dog buns come in packages of 8. What is the least number of hot dogs & buns you can buy so that you have the same number of each? | 99. Joelle makes $9 each hour she babysits. If a new phone costs $112, how many hours must she babysit so that she has enough money to buy the phone? | 100. Heather goes to ballet three times a week for 30 minutes each time. She tap dances twice a week for 45 minutes each time. How much time in all does she dance per week? |