Step # 1
The Pretest

Begin with a 49-question pretest. This pretest covers material required by many states to show an understanding of high school mathematics.

Complete solutions to the pretest have been provided in Appendix 2. They may be used to score the pretest and see how to do questions answered incorrectly.

Step # 2
Using Learning Units

Need help? Quick Notes has 49 easy to follow learning units. Pretest questions are numbered to match learning unit numbers. If your answer to pretest question 5 to simplify $24 + (6 - 3)(4) - 5^2$ was incorrect, study Learning Unit 5 on The Order of Operations.

Quick's one-page learning units explain math concepts with an easy to follow outline. By limiting learning units to one page, Quick Notes makes learning difficult concepts easier.

Education Internet Library covers the economics of education, reforming education...
Each learning unit is followed by **practice problems**. Space has been provided to determine their solutions. Learning units and practice problems are on facing pages. Students need only look to their left for help with difficult problems.

Score the practice problems using answers provided in Appendix 4.

Education Improvement Internet Library has free material for teachers, administrators, and parents.

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**Step #3 Reviewing Key Concepts**

Learning units covering similar material have been grouped into 7 parts. Each part ends with a review of key concepts and a quiz (except for part 6, which does not have a review).

### Part 1 Review of Whole Numbers

**Place value names**

<table>
<thead>
<tr>
<th>Place values</th>
<th>Millions</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Units</th>
</tr>
</thead>
</table>

**Writing numbers**

The number four million two hundred sixty-five thousand four hundred one is written as follows: 4,265,401

**Writing whole numbers with words**

Rules for writing whole numbers:

1. Do not use the word "and"
2. Use a hyphen for numbers 21 to 99

The number 83,206,812 would be written as follows: eighty-three million two hundred six thousand eight hundred twelve

**Symbols used to compare numbers**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Symbol</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>is greater than</td>
<td>&gt;</td>
<td>8 &gt; 6</td>
</tr>
<tr>
<td>is less than</td>
<td>&lt;</td>
<td>6 &lt; 8</td>
</tr>
<tr>
<td>is equal to</td>
<td>=</td>
<td>7 = 4 + 3</td>
</tr>
<tr>
<td>is not equal to</td>
<td>≠</td>
<td>1 + 6 ≠ 8</td>
</tr>
<tr>
<td>is approximately equal to</td>
<td>≈</td>
<td>90 ≈ 88</td>
</tr>
</tbody>
</table>

**Rounding**

1. Determine the number of places desired in the answer.
2. Round up if the digit to the right is greater than or equal to 5.
3. Do not round up if the digit to the right is less than 5.
4. Replace the remaining digits with zeros.

Rounding 478 to the nearest ten gives 480.
480 = 478

Rounding 7,648 to the nearest hundred gives 7,600.
7,600 = 7,648
Step # 4
Measuring Progress with a Quiz

Score the quiz and learn how to do problems answered incorrectly using the quiz solutions provided in Appendix 3. If not completed earlier, the additional practice problems related to this quiz may be done at this time or they may be saved for later use.

Step # 5
Tying Everything Together with a Cumulative Problem Review

Before going on to the next part of Quick Notes, make sure your skills are up to par with a cumulative problem review. Like the pretest, cumulative review problems are numbered to match the learning unit number that contains their explanation. If you miss question 5, see how to do it correctly by studying Learning Unit 5. Answers to cumulative review problems are provided in Appendix 4.

Step # 6
The Posttest

Taking the posttest is the final step of the Quick Notes Learning System. Use the posttest solutions provided in Appendix 2 to learn how to do problems answered incorrectly.

### Quiz 2 Fractions

1) Describe a fraction in the space provided.

2) Write a fraction describing one player on a ten-player basketball team.  
   Answer ________

3) Write a fraction describing the five starting players on a ten-player basketball team.  
   Answer ________

4) Write each fraction as an equivalent fraction with the given denominator.  
   A) \( \frac{1}{3} = \frac{1}{15} \)  
   B) \( \frac{3}{5} = \frac{1}{100} \)

5) Write 8/2 as a whole number.  
6) Write \( \frac{17}{5} \) as a mixed number.

### Parts 1 - 5 Cumulative Problem Review

1) Write the number four hundred thirty-five thousand.  
2) Round your problem 1 answer to the nearest ten thousand.  
3) \( 2(3)^2 + 4(6 - 2) + 2 = \)
4) \( \frac{3,654}{42} = \)
5) \( 8,154 + 1,846 \)
6) Which is a composite number?  
   A) 5  
   B) 7  
   C) 9  
   D) 11  
   E) 13  
   Answer ________

7) Write your share of a pizza you are sharing with 3 friends.

### Posttest

Directions: Solve the following problems. Please note posttest problems are numbered to match learning unit numbers. Complete solutions are provided beginning on page 211.

1) Which number is fifteen thousand four hundred sixty?  
   A) 15046  
   B) 15406  
   C) 15460  
   D) 14064  
   Answer ________

2) Round 68,559 to the nearest thousand.  
3) 96 + 673 + 9 =  
4) 704 - 38 =  
5) Simplify \( 4 + 2(12 - 4) + 2^2 \)  
6) What are the prime factors of 30?
I'm Fred Look Ahead.
Use me as a reminder to look over
the main points of a learning unit before
reading it in detail. Looking around
first will make learning easier.

I'm Lulu Review.
I'm here to remind you
to review once in a while.
So jump on board, and
we will review together.

Be sure to look at the Table of Contents
on the next page. You need to know
where you are going because Lulu is flying
all over this book and you might crash into her.