



Literacy at Hartford Public High School

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Reading a Math Text

from Reader's Handbook, Great Source

A math text is quite different from other textbooks. It is full of special signs and symbols, and the writing is straightforward and to the point. Reading in math is, in a way, like looking for a road sign. If you miss it, you'll be off in the wrong direction. In fact, when you read math, you'd better go slowly, for every word counts. Every symbol, every example, and every diagram is important. To be good at math, you have to be a careful reader.

In math books, one concept builds upon another. If you don't understand material in chapter one, by the time you get to chapter three, you'll be lost. The instruction in a math is concentrated, so you have to focus on it without distraction. Make sure you're fresh, alert, and comfortable when you sit down to study math.

Before you begin your work, set a purpose before you begin reading. One way to do this is to turn the lesson or section title into a question. For example, a section titled "Numbers and Number Operations" might lead to the following purpose-setting questions:

- What are number operations?
- What do I need to know about numbers and number operations?

Now that you have a purpose, you can go ahead and preview the chapter. This way you'll know what to expect when you actually read the material. As you preview, watch for the following things:

- The title;
- Any listed goals;
- The introductory paragraph;
- The headings, boldface words, color, and highlighted items;
- The models, diagrams, and examples;
- The boxed items; and
- The review questions.

Following a preview of the above-mentioned section, you might learn the following:

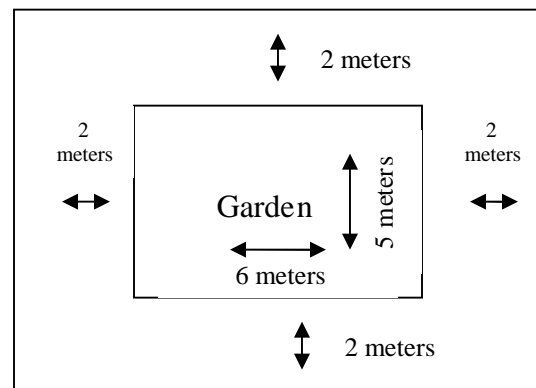
- Numbers can be written as fractions, decimals, and percents.
- The four basic number operations are addition, subtractions, multiplication, and division.
- The results of the four basic number operations are called sum, difference, product, and quotient.
- Grouping symbols are sometimes used in math expressions.

At this point, you have some idea of what is in the chapter. Now you need a strategy to help you get the most out of the chapter.

One of the most useful strategies in math is visualizing and thinking aloud. Visualizing helps you take an abstract idea (the math problem) and turn it into a concrete image. You can visualize mentally, or you can make a drawing to help you. As you draw, talk to yourself about what you're doing. By thinking aloud, you reinforce your mental processes.

Consider how to visualize the following problem:

A garden area is 5 meters wide and 6 meters long. A gravel walkway that is 2 meters wide surrounds the garden. How much will it cost to put a fence around the outside of the walk if the fencing sells for \$18 a meter?



As you draw the sketch of the problem, think aloud. This allows you to do three things:

1. Put the steps into words that you can easily understand.
2. Listen to yourself say the words.
3. Work toward a solution, one step at a time.

Weed Out Excess Information

from Math Yellow Pages

Some problems have information that is not needed. The excess information just complicated the problem. So, it is helpful to be able to sort out what is not needed in order to find a solution. Consider the information given in the following problem:

Jenna's horse refused 4 jumps today, and cleared 12. Yesterday, the horse cleared 7 jumps more than today. She won 2 first place ribbons. How many jumps did the horse clear in the 2-day jumping event?

The information not needed is the 4 jumps refused and the 2 first place ribbons.