

Reading for STEM and legal professions

For each sentence,

1. Read single sentence out loud.
2. Highlight any key vocabulary terms or quantities.
3. Read the sentence aloud again.
4. Wait 3 seconds.

For each clause in the sentence,

1. Read clause out loud.
2. Ask, "Does this clause **contain any logical content that differs from** any logical content **already read** in the same passage?" To answer this question, you might very well need to re-read (many times) the clause currently under study and previously read clauses and sentences.
 - a. If so, **highlight** the portion of the clause that contains the **new logical content**. If the new logical content is a definition, postulate, law, or theorem, follow the steps in Box F below.
 - b. Otherwise, do not add additional highlighting to the clause. Instead, move on to analyze the next clause.

If a sentence remains difficult to understand after following the preceding steps, you might want to diagram the sentence.

Do the following for **each figure**

1. Stare at the figure for 3 seconds.
2. Read every axis label.
3. Drag your finger across each path segment.
4. Point to each labeled variable or quantity, saying out loud a sentence fragment description for each variable as you point to it.
5. Read the caption.
6. If the figure introduces a definition, postulate, law, or theorem, follow the steps in Box F below.

Do the following **for each equation** or mathematical relationship.

1. Copy the equation in handwriting.
2. Read the equation aloud.
3. If the expression illustrates the result of algebraically manipulating a previous equation, say out loud a description of the mathematical manipulation that was used.
4. If the expression represents a newly introduced law, point to each variable in the equation and say an English sentence fragment describing its meaning. Follow the steps in Box F below.

Box F. Make a note of each logical principle introduced

Each introduced definition, postulate, law, and theorem (whether it be presented in the format of a sentence, figure, or equation) needs to be copied onto a **flashcard**, with special conditions listed as needed. If you have difficulty keeping track of prepositional phrases and subscripts, organize input variables in a table of items/situations and their properties.

For example, for the equation $\Sigma F_{IN} = \frac{mv^2}{r}$, you can draw a picture of a mass traveling along a circular path at constant speed and draw an arrow pointing from m in the equation to the moving object, an arrow pointing from v in the equation to whoosh lines behind the traveling object, and an arrow from r in the equation to the radius of the circular path in the illustration. You can use my cribsheets as flashcards, but you must print the cribsheets out so that you can hold them.