

## Analyzing and Completing Homework Problems

In every subject area there will be homework assignments and problems to be solved. You will be required to analyze the problems and then apply knowledge that you have learned in this course or in previous courses. All of these will be related to the materials you have studied in the course up to this point.

### Accurate Reading is Important

Read the whole problem to understand the assignment. Start thinking about which theories, formulas, and graphics relate. Answer only what is being asked.

These **four steps** can be used to analyze any homework problem.

1. Highlight key words and look up any words or phrases that you don't understand.
2. Analyze the question for directions including any words or phrases that restrict your answer.
3. Identify the steps you need to complete from the instructions.
4. Rewrite the problem in your own words.

#### 1. Highlight the Key Words (*what is this about?*)

Underline key words, including new technical vocabulary and definitions, as you read to help you interpret material and the problem accurately. Find any words or phrases that you don't understand and look up their meanings in the course textbook or other resource.

#### 2. Analyze the Question for Directions and Other Information (*what to do or not to do*)

- **Direction words** – usually verbs, tell you what you have to do, e.g., 'solve' or 'compare'
- **Content words** – deal with topics or subtopics and identify the material you will focus on
- **Limiting words** – limit the scope of the topic to a particular area, e.g., 'all', 'some', 'except', 'instead', 'without', and others depending on the subject. Check if the question is stated in the positive or the negative. These will help you answer the problem accurately.

#### 3. Identify the Steps (*required items and processes*)

Every problem will have action verbs that will indicate the operations, methods, and scope for answering. Check your notes and memory for words that your instructor used and clarify what they want when you see these in problems. For more options you can refer to [Essay and Exam Terms Learning Aid](#)

#### 4. Rewrite the Key Elements in your own Words (*what I think it means*)

Write down your understanding of what you are being asked to do, and include any diagrams, formulas, or other items that you feel are important. Then compare it to the problem (and any rubric or checklist) that you were given. Add in anything that you may have missed. Flag any part that you have questions about to check in with your instructor. The goal is to answer the specific problem as posed.

### Complete Your Homework

With this information you can approach the problem as an open book 'exam'. Ensure that you can define the key words and apply the concepts. Look up the required procedures that the problem and the specific verbs have outlined. Proceed step by step through the problem.

When you get stuck on a concept or a procedure that is not clarified by your text materials or your own notes, clearly identify the area you are having trouble with and then consider who can help you solve this. Your first source will always be your instructor in the subject. Attend the weekly office hour, ask your question in class, or send them an email with a clear question.

Another option is to book a session with a Peer Tutor in your subject area through The Learning Centre, either on your campus or online. This can be done through the TutorOcean booking system [here](http://tlc.kpu.ca) (tlc.kpu.ca). If you need support to help you plan efficient and effective ways to study your subject, Learning Strategists at TLC can work with you to improve your learning.