Resource **Writing Principles**

Writing background

- You might be surprised to be asked to write short responses to questions in this class. Writing in a math class? This course emphasizes writing for the following two reasons:
- Writing is a learning tool. Explaining things such as the meaning of data, how you calculated the data, or how you know your answer is correct deepens your own understanding of the material.
- Communication is an important skill in quantitative literacy. Quantitative information is used widely in today's world in products such as reports, news articles, publicity materials, advertising, and grant applications.

Understanding the task

One important strategy in writing is to make sure you understand the task. In this course, your tasks are questions in assignments, but in other situations, the task might be a question on a report form, instructions from your employer, or a goal that you set for yourself. To begin to write successfully, ask yourself the following questions:

- What is the topic of the writing task?
- What is the task telling me to do? Some examples are given below:
    - Describe how you found the answer.
    - Explain why you think you have the right answer.
    - Reflect on the process of coming up with the answer.
    - Make a prediction about the next data point.
    - Compare two data points or the answers to two parts of the problem.
- What information am I given to help me with the task?

Look at this example and the answers to the questions:

Example: In Preview Assignment 2.A, you read about monitoring your readiness.

Explain briefly why it is important to monitor your readiness before coming to class.

- What is the topic of the writing task? [Answer: Monitoring whether I am ready for the next class meeting.]
- What is the task telling me to do? [Answer: It is asking me to explain why "monitoring readiness" is important.]
- What information am I given to help me with the task? [Answer: I can look back at the Preview Assignment for 2.A if I need to refresh on this topic.]

Writing principles

Principle	If the problem has words, so should the answer! Strive to be neat and to use proper grammar, spelling, and punctuation.
Principle 2	Each answer should be in a complete sentence that stands on its own, which means that the relevant information from the problem should be in the answer. The readers should understand what you are trying to say even if they have not read the question or writing prompt. Relevant information includes: • Information about context. • Quantitative information. For example, consider this question: What are some factors you think may have led to this change in doubling times? **Insufficient response**: Improved health care, better food **Good response**: The world's population has increased rapidly. This increase may be due to factors such as improved health care, better food supplies, and clean water.
Principle 3	If you use tables or graphs in your response, be sure they are clearly and thoroughly labeled.
Principle 4	Let the reader know if you are making any assumptions. This could be necessary when there is unclear information in the problem. For example: Mary's bedroom is 10 feet wide, 12 feet long, and 9 feet high. If a gallon of paint covers 300 square feet, how many gallons should Mary buy? After doing the math and writing your answer, you might say, "*I didn't know how many windows and doors Mary had, so I just didn't take them into account in my calculations.*"