

Language of Mathematics Assignment 4
Related Rates

Learning Objectives

- Develop an intuitive understanding of Related Rates.
 - Able to explain the mathematical concept of Related Rates in a well-organized and well written report.
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Grading rubric for report

Criteria	5 pts	2 pts	1pt or 0pts
Learning Objectives	Clearly shows the learning objectives and topic is thoroughly covered.	Not all learning objectives are achieved and/or topic is not thoroughly covered.	None of the learning objectives are achieved and/or shows a misunderstanding of the topic.
Report quality	Well-organized, well written, displays original thought, ideas follow and relate to each other in a logical way.	Not well written and/or contains a few grammatical or spelling errors, but shows original thought and ideas follow and relate to each other in a logical way.	Shows very little information, and contains many grammatical or spelling errors. Little effort made, looks like it was prepared night before or copied from the Internet or another student. Not well written, ideas do not follow in a logical way.

Report

Answer the following questions in your report. Your report should be more than a few sentences but less than a page. Do not restate definitions in the textbook. Use your own words.

- What is a Related Rate? Prove a definition in your own words.
 - Develop a strategy (outline a step by step procedure) for solving a Related Rate problem.
 - Use your strategy and solve the following problem: A dinghy is pulled toward a dock by a rope from the bow of the boat through a ring on the dock 6 ft above the bow. If the rope is hauled in at the rate of 2 ft/sec, how fast is the boat approaching the dock when 10 ft of rope are out?
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Submission

Your instructor will give you details on submitting your report.