

Classroom: Teacher's Guide
High School Math



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The Port of Long Beach
925 Harbor Plaza
Long Beach, CA 90802
(562) 590-4121

www.polb.com

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Preface

The Port of Long Beach is an industry-leading, environmentally friendly, global seaport. Every year about \$100 billion worth of cargo passes across the Port of Long Beach's docks. Imported cargo arrives at the Port bound for store shelves, factories and other destinations locally and across the United States; and exports leave, bound for foreign ports and international consumers. These goods include everything from electronics and machinery to food, cars and petroleum products.

As a key international trade hub, the Port of Long Beach supports nearly 1.5 million jobs across Southern California and the nation, and these jobs – as engineers, environmental scientists, freight forwarders, crane operators and logistics specialists, just to name a few – require a highly skilled workforce.

Port of Long Beach: Classroom aims to make students aware of the Port of Long Beach and to prepare them for port career opportunities. These lessons combine real-world Port of Long Beach situations with content from the California state-approved curriculum. The result is an engaging and interactive series of lessons that fully conform to the state content standards while getting students excited about the major global seaport right in their own backyards.

If you want more information about any of the information in these lessons, please visit our Web site at www.polb.com.

Let's get started!

About *Port of Long Beach: Classroom* High School Math Teacher's Guide

These math lessons were developed in partnership with the Long Beach Unified School District. The teacher's guide should be used in conjunction with the Powerpoint presentations to provide an interactive and visual representation of the content. These lessons are fully aligned to the California State Curriculum and are intended to complement the teacher's own lesson plans.

The lessons are divided into several parts, which should be completed in order.

Terminal Objective: The overall lesson objective

Content Standard Reference: The California Content Standard to which the lesson teaches

Materials: Materials required for the lesson

Time Required: The estimated number of 1-hour classes needed to complete the lesson

Introduction of Lesson: Pre-lesson preparation

Anticipatory Set: Information or activities that prepare students for the upcoming lesson

Student Objective: What the students will get out of the lesson

Purpose: Description of real-life applications of the content and why the skills are important for students

Procedure: The body of the lesson

Input: Information needed to understand the lesson, such as definitions or formulas

Modeling: A description of how to use the formulas or complete the problems

Check for Understanding: Practice problems and activities to check for student learning

Guided Practice: An opportunity for students to apply their skills to new problems

Closure: A summary of the lesson, which may include homework or additional activities