

Comparing Lines and Linear Equation Liquid Flow Activity

Description

This activity has students interpret speed as the slope of a linear graph and translate between the equation of a line and a graphical representation.

Prep Work

Photocopy, cut up and organize the card sets. Have enough sets for groups of 2-3 students. Groups of 2 students are preferred.

Each student will need copies of the assessment tasks, The Race and The Walk-a-thon. It will help students if the two pages of each task are printed on separate pages.

Each small group of students will need a mini-whiteboard, pen, and eraser, the cut up Card Set: Graphs 1, Graphs 2, Equations, Flowing Liquid, a large sheet of paper for making a poster, and a glue stick.

If possible, a real model of two identical containers connected at the neck to demonstrate the liquid flow. For example, two identical soda bottles, connected at the neck with tape.

Instructions

This is a complete lesson created by the Mathematics Assessment Resource Service (MARS)

It can be found at <http://map.mathshell.org/lessons.php?unit=8230&collection=8>

Please read the lesson plan that comes with the activity. You may want to consider reducing the number of graphs you give the students to save time.

- **Pre Activity**

There is a pre-activity worksheet to have students complete before the actual activity.

- **Activity**

Please read the lesson plan that comes with the activity.

- **Post Activity**

There is a post activity worksheet that you can choose to have students complete to assess their learning.

Time Required

15-20 minutes before the lesson

60-80 minutes during the activity

15-20

minutes follow-up