

Points on a Line

by – Margaret Bambrick and Algebra Group

Activity overview

The Points on a Line activity is intended to develop student understanding of slope of a line. This activity is based on the concept of vertical change and horizontal change when moving between two points on a line. Students will perform an action on the tns file and observe the consequences of their actions.

Concepts

Ratio of vertical change to horizontal change is constant between any two points on a line
 Understand the meaning of slope of a line, “rise over run”

Teacher preparation

Download the *Points_On_a_Line.tns* document

Classroom management tips

This activity can be used as a student worksheet or as a group activity, or (less effectively) as a demonstration.

TI-Nspire Applications

Notes, Graphs & Geometry

Step-by-step directions

Step 1

Follow the student worksheet through questions 1 and 2 of Part 1. This part of the activity is designed for the student to gain understanding about the action/consequence tool.

Step 2

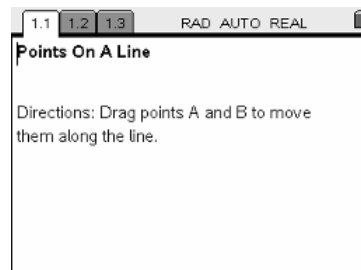
Continue through Part 2, Questions 3-6 of the student worksheet where the student uses the action/consequence tool to develop an understanding of the mathematics involved.

Step 3

Part 3, #7-9 on the student worksheet were designed as probing questions that lead students to further inquiry.

Step 4

Part 4, #10-12 on the student worksheet are designed to be a challenge to the student or can be used as an assessment.



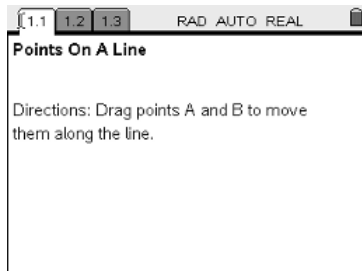
Activity extensions

- *The challenge questions from 10-12*
- *Additional inquiry questions that the teacher come up with.*
- *Connections to other content areas to explore*

Points on a Line

by – Margaret Bambrick

Student TI-Nspire Document
Points_On_a_Line.tns



Points On A Line

Directions: Drag points A and B to move them along the line.

