

*II - Explore***Standard:**

8th Grade 8.A.3.1 Students are able to describe and determine linear relationships.

8th Grade 8.A.4.1 Students are able to create rules to explain the relationship between numbers when a change in the first variable affects the second variable.

**Purpose:**

Students find relationships between numbers when the first variable affects the second variable. Students graph linear equations and find the slope from a line or ordered pairs.

**Materials needed:**

- Coordinate plane or graph paper
- Boxes, books, or anything of uniform size that students can stack
- Table for recording findings
- Pencils

**Instructions:**

1. Place students in groups (number in each group will vary depending on supplies and class size).
2. Students measure the depth of one book/box and record.
3. Students stack one book/box on top of the other.
4. Students' measure the depth of two books/boxes and record.
5. Repeat as necessary.
6. Use record sheet to graph ordered pairs on a coordinate plane.
7. Find slope of the line.

**Adaptations:**

- None

**References:**

- None