### **Lines with Transversals**

# **Objectives:**

- -Angle pairs formed by a transversal line corresponding, alternate interior, alternate exterior, same-side interior, and same-side exterior
- -Parallel lines and angle pairs
- -Angle pairs congruent or supplementary

## Use TI-Nspire to explore the above objectives.

Move to new page by clicking ctrl then right arrow on NavPad.

Move to split screen by clicking ctrl then click tab.

Move arrow to a line or point grab and move to investigate angle pairs.

## **Supplies and Materials:**

TI-Nspire

Student worksheet

Student TI-Nspire file sent to student handhelds

### **Students Conjecture:**

Do the angles remain congruent or supplementary?

### **Activity Overview:**

Students will use the TI-Nspire file and record their answers on the Word worksheet. The TI-Nspire file has been created to allow students to explore and measure the relationships of angle pairs with and without parallel lines.

### **Pre-requisite Knowledge:**

Students will need some basic knowledge of TI-Nspire menus, grabbing objects, moving objects, and measuring angles. They will also need to know the definitions of: congruent, supplementary, points, lines, angle symbols, etc.

### **Expectations:**

Students will explore and connect Geometry vocabulary, angle pairs with and without parallel lines, and justify their conclusions. This exploration will lead to justifying the steps of proofs that involve proving lines parallel.