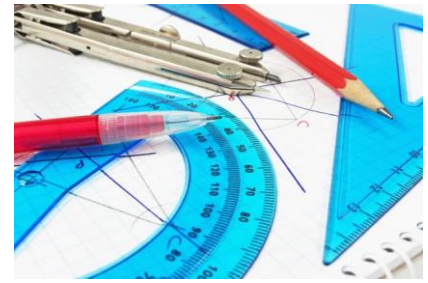


# Geometry Unit 1A Logical Argument and Constructions: Proof & Congruence



## Our Learning Goals:

We will...

- ✓ find and compare lengths of segments and measures of angles.
- ✓ identify special angle pairs and use their relationships to find angle measures.
- ✓ make basic constructions using a straightedge and a compass.
- ✓ use inductive reasoning to make conjectures.
- ✓ recognize conditional statements and their parts.
- ✓ write converses, inverses, and contrapositives of conditionals.
- ✓ write biconditionals and recognize good definitions.
- ✓ use the Law of Detachment and the Law of Syllogism.
- ✓ connect reasoning in algebra and geometry.

## Why do we study this?

- ❖ Reasoning helps us to take information, analyze and process that information, and then use that information to solve problems.
- ❖ Parallel lines and angles are used in construction projects related to streets, homes, businesses, and other city structures.

## How we will show what we have learned...

Formative Assessments	Summative Assessments
Ongoing formative assessments during lesson & homework activities will help in monitoring learning and providing feedback for students.	Summative assessments to measure learning at the end of concepts will include the following: <ul style="list-style-type: none"> <li>• Test: Tools of Geometry</li> <li>• Test: Reasoning and Proof</li> <li>• Unit 1A Exam (District-wide)</li> </ul>

## Sample Problem:

All smiling cats talk. The Cheshire Cat smiles. Therefore, the Cheshire Cat talks. Is this statement valid or invalid? Explain your reasoning.

## Additional Support:

- Check the teacher web page and Canvas page for notes, activities, and assignments.
- Search the topic on the web. We recommend using Khan Academy.
- Attend tutorials.