

Bridge to Unit 1B

- Since we know that the statements “segments with equal measure are congruent” AND “congruent segments have equal measure”, what do you think the symbol means when used like the following: “segments with equal measure $\leftrightarrow \cong$ segments”?
- Inductive reasoning** means that we look at patterns and make a conjecture based on that pattern. I listed the following: A, E, I. What do you think comes next? ____ Defend your choice:
- Given the algebraic equation, match the **algebraic property** which justifies each step that generates an equivalent equation for $4(x+3) - 6 = 6$
 - ____ $4x + 12 - 2 = 6$ 1) Addition or Subtraction Property of Equality
 - ____ $4x + 10 = 6$ 2) Multiplication or Division Property of Equality
 - ____ $4x = -4$ 3) Simplification
 - ____ $x = -1$ 4) Distribution
- If $x=8$ and $8=y$, then what do you know about x & y ? _____
- If I said that **ALL** Ballston Spa students clean their rooms on Friday night, would you believe me? ____ Why or why not?
- If I said, “Ballston Spa’s mascot is the Scottie Dog, **and** our colors are red & black,” was I being truthful? ____ Why or why not?

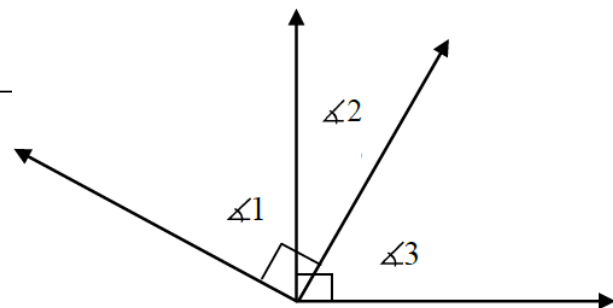
7. Look at the drawing at right.

a. What conclusion can you make about $\angle 1$ & $\angle 3$? _____

b. Here is the proof; see if you can match the reasons:

- ____ $m\angle 1 + m\angle 2 = 90^\circ; m\angle 3 + m\angle 2 = 90^\circ$
- ____ $m\angle 1 + m\angle 2 = m\angle 3 + m\angle 2$
- ____ $m\angle 2 = m\angle 2$
- ____ $m\angle 1 = m\angle 3$
- ____ $\angle 1 \cong \angle 3$

- Substitution
- Definition of Complementary Angles
- Definition of Congruency or = measure $\leftrightarrow \cong$ figures
- Subtraction Property of Equality
- Reflexive Property of Equality



- Go online to your teacher’s website and fill in the Axioms pages 1&2 for “Sum of Parts” (note the last row will be empty) and the “Bisectors”. Address: <http://www.bscsd.org/webpages/sgrubeedwards/geometry.cfm?subpage=14395> and click on Homework Packets/Supplements