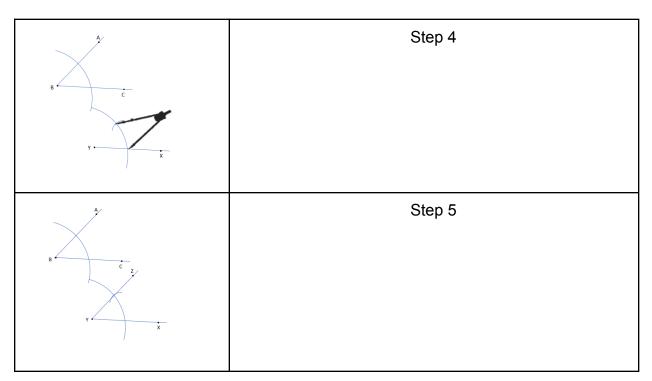
## **Segment 1 Review - Part One**

# **WATCH VIDEO PART 1(click here)**

#### Slide 1: Undefined Terms vs Defined Terms

|                      | Parallel lines:      |                     |  |
|----------------------|----------------------|---------------------|--|
|                      | Line segment:        |                     |  |
|                      | Circle:              |                     |  |
| <b>Slide 2</b> : Cop | ying an Angle with a | a compass and Ruler |  |
| y x                  |                      | Step 1              |  |
| B C                  |                      | Step 2              |  |
| a c                  |                      | Step 3              |  |



Click here for help with the other constructions

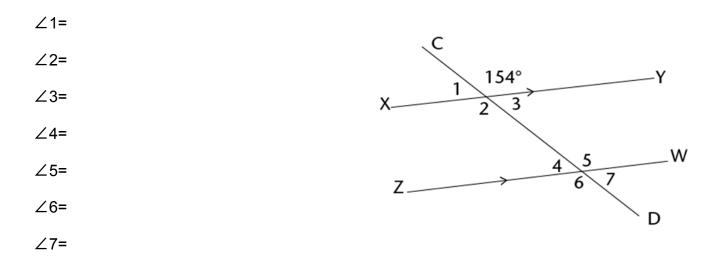
Slide 3: Logic Statements

| Type of<br>Statement | Conditional statement   | Converse   | Inverse  | Contrapositive   |
|----------------------|---|--|--|--|
| Definition           | an assertion that<br>states an event is<br>dependent upon<br>another event<br>occurring; in the<br>form of "if, then" | a statement created by switching around the hypothesis, or "front," and the conclusion, or "back," of the original statement | the inverse of a<br>statement is the<br>statement in the<br>same order with<br>both parts<br>negated | a statement in the opposite order of an original statement with both parts negated |
| Formula              | If p, then q  | If q, then p   | If not p, then not q   | If not q, then not p   |
| Example              |   |  |  |  |

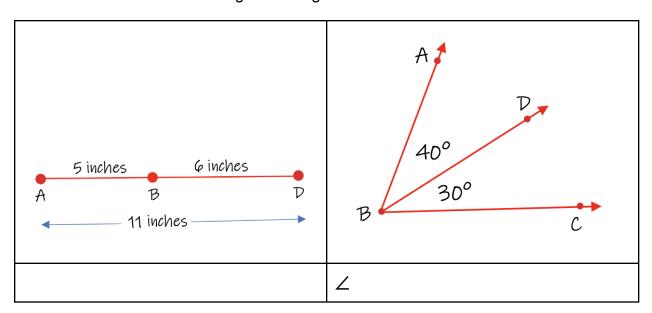
Slide 4: Angle Relationships

| Alternate Interior Angles |            |
|---------------------------|------------|
| Alternate Exterior Angles |            |
| Corresponding Angles      | 1 / 2 / k  |
| Vertical Angles           | 5 6<br>8 7 |
| Same Side Interior Angles |            |
| Same Side Exterior Angles | 1          |

Slide 5: Application of Angle Relationships



**Slide 6:** Angle and Segment Addition Postulates



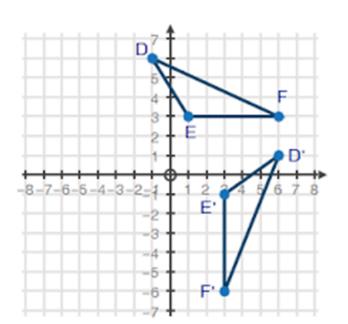
Slide 7: Translations

| Pre-Image | Translation Rule | Image |
|-----------|------------------|-------|
|           |                  |       |
|           |                  |       |
|           |                  |       |

Slide 8: Series of Transformations

| Pre-Image | Translation Rule        | Image |
|-----------|-------------------------|-------|
| A(1, 1)   | Rotate 180°             |       |
| A'(       | Reflect over the y-axis |       |
| A"(       | Reflect over the x-axis |       |

Slide 9: Determining The Transformation

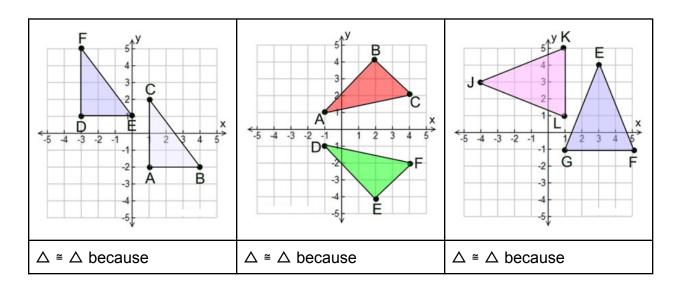


What transformation took place?

Slide 10: Rigid And Non-Rigid

Transformations & Congruence

Rigid transformations:



Slide 11: Inscribed Polygons (Honors Only)

| Inscribed Hexagon | Inscribed Triangle | Inscribed Square |
|-------------------|--------------------|------------------|
|                   |                    |                  |

Slide 12: Angle of Rotation (Honors Only)

To find the angle of rotation,

### **Segment 1 Review - Part Two**

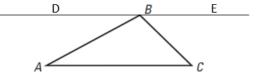
### **WATCH VIDEO PART 2 (Click Here)**

Slide 1: Triangle Congruence Postulates

| <ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol> | 1.   |
|--|--|
| 5.   | 3.   |
|  | SSA is not sufficient for congruency. It may make two different triangles. |

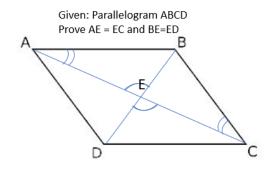
Slide 2: Triangle Sum Theorem Proof

Given: Triangle ABC Prove: < BCA + < ABC + < CAB = 180



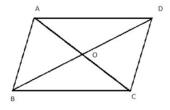
| Statements | Reasons |
|------------|---------|
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |

Slide 3: Diagonals in a Parallelogram Bisect Each Other Proof



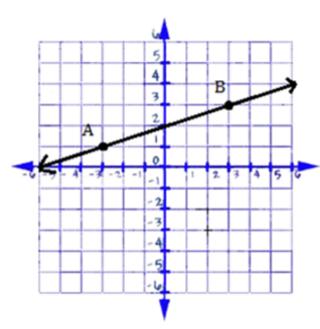
| Statements | Reasons |
|------------|---------|
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |
|            |         |

Slide 4:Parallelogram Application



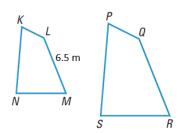
ABCD is a parallelogram. If m∠BAD = 121°, What else do we know?

Slide 5: Dilations



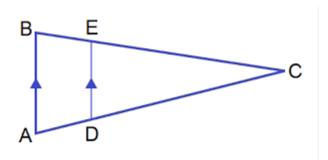
Line g is dilated by a scale factor of 2 from the origin to create line g'. Where are points A' and B' located after dilation, and how are lines g and g' related?

Slide 6: Dilations



A photocopier was used to dilate a quadrilateral. The figure shows the quadrilateral and its photocopy: The ratio of KL:PQ is 1:2. What is the length, in meters, of side QR on the photocopied image?

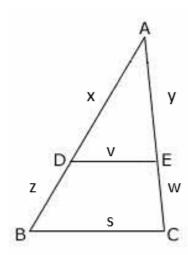
Slide 7: Applying the Triangle Proportionality Theorem



Given: Triangle ABC and line DE || AB What all do we know?

Slide 8: Applying the Midpoint Theorem

If point E is the midpoint of AC and point D is the midpoint of AB, which expression represents the value of v?



Slide 9: Similar Triangles

Given the figure below How long is DC?

