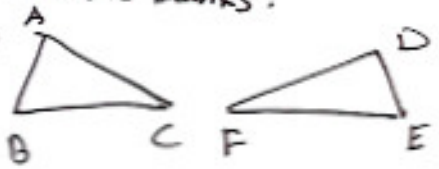
Name _____

Due Date _____

Block _____

Shapes & Angle Relationships #2

Fill in the blanks:

① 

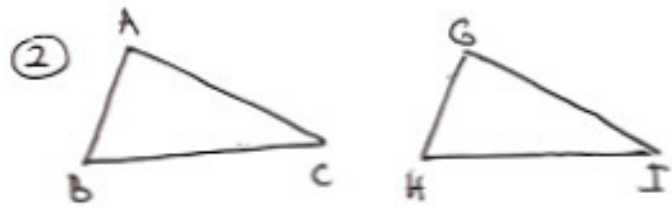
Given: $\overline{AB} \cong \overline{DE}$

$\overline{BC} \cong \overline{EF}$

$\overline{AC} \cong \overline{DF}$

Prove: $\triangle A \cong \triangle D$

1. _____	1. Given
2. _____	2. Given
3. _____	3. Given
4. $\triangle ABC \cong \triangle DEF$	4. _____
5. _____	5. CPCTC

② 

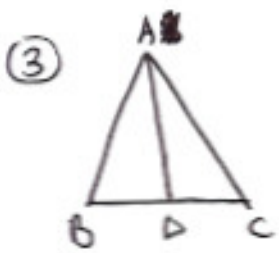
Given: $\overline{AB} \cong \overline{GH}$

$\overline{AC} \cong \overline{GI}$

$\angle A \cong \angle G$

Prove: $\overline{BC} \cong \overline{HI}$

1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. $\triangle ABC \cong \triangle GHI$	4. _____
5. _____	5. CPCTC

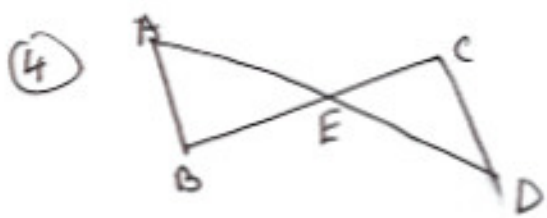
③ 

Given: $\overline{AB} \cong \overline{AC}$

$\overline{BD} \cong \overline{CD}$

Prove: $\angle B \cong \angle C$

1. _____	1. _____
2. _____	2. _____
3. _____	3. Reflexive Prop
4. _____	4. Def $\cong$ Line Segs (3)
5. $\triangle ABD \cong \triangle ACD$	5. SSS (1,2,4)
6. $\angle B \cong \angle C$	6. _____

④ 

Given: E is midpoint of $\overline{AD}$

E is midpoint of $\overline{BC}$

Prove: $\angle A \cong \angle D$

1. _____	1. _____
2. _____	2. _____
3. $AE = DE$	3. Def midpoint (1)
4. _____	4. Def $\cong$ L S. (3)
5. _____	5. Def m.p. (2)
6. $\overline{BE} \cong \overline{EC}$	6. Def $\cong$ L S. (5)
7. $\angle AEB$ Vert $\angle DEC$	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. CPCTC