Name _____

Due Date _____

Block _____

Intro to Proofs #1

Fill in the missing steps:

① Given: $AB = CD$
$CD = EF$
Prove: $AB = EF$

1. _____	1. Given
2. $CD = EF$	2. Given
3. _____	3. Trans Prop (1,2)

② Given: $AB = CD$
$EF = CD$
Prove: $AB = EF$

1. _____	1. Given
2. _____	2. Given
3. $CD = EF$	3. Symm. Prop (2)
4. $AB = EF$	4. _____ (1,3)

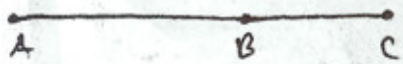
③ Given: $\overline{AB} \cong \overline{CD}$
$\overline{CD} \cong \overline{EF}$
Prove: $\overline{AB} \cong \overline{EF}$

1. _____	1. Given
2. _____	2. Given
3. $AB = CD$	3. Def $\cong$ Line Segs (1)
4. _____	4. Def $\cong$ Line Segs (2)
5. _____	5. Trans (3,4)
6. $\overline{AB} \cong \overline{EF}$	6. Def $\cong$ Line Segs (5)

④ Given: $AB = CD$
$CD = EF$
$EF = GH$
Prove: $AB = GH$

1. _____	1. Given
2. $CD = EF$	2. _____
3. $AB = EF$	3. _____ (1,2)
4. $EF = GH$	4. _____
5. $AB = GH$	5. Trans (3,4)

⑤



Given: $AB = 7$
$BC = 3$
Prove: $AC = 10$

1. _____	1. _____
2. $BC = 3$	2. _____
3. $AB + BC = AC$	3. Line Seg. Add Postulate
4. $AC = AB + BC$	4. Symmetric (3)
5. $AB + BC = 10$	5. _____ (1,2)
6. $AC = 10$	6. _____ (4,5)