NAME: _____   DATE:_____   PERIOD:_____

Fill in the blanks for any missing Statements or Reasons.

1. Given: B is the midpoint of $\overline{AC}$
C is the midpoint of $\overline{BD}$
Prove: AB = CD

A ●————————●————————●————————● D
(A   B   C   D)

Statements	Reasons
1) B is the midpoint of $\overline{AC}$	1)
2) $\overline{AB} \cong \overline{BC}$	2)
3) C is the midpoint of $\overline{BD}$	3)
4)	4) Definition of midpoint
5) $\overline{AB} \cong \overline{CD}$	5)
6)	6) Definition of congruent segments

2. Given: m∠1 = m∠3
Prove: m∠DBC = m∠EBA
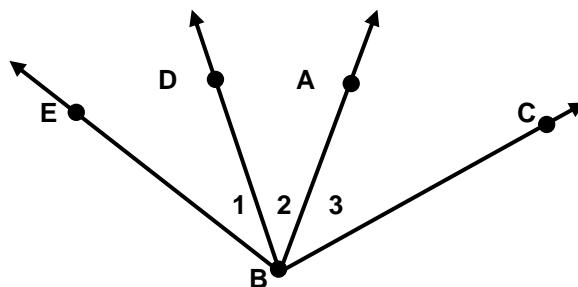
Statements	Reasons
1) m∠1 = m∠3	1)
2) m∠EBA = m∠1 + m∠2	2)
3) m∠DBC = m∠3 + m∠2	3)
4) m∠1 + m∠2 = m∠3 + m∠2	4)
5)	5)

NAME: _____ DATE:_____ PERIOD:_____

3. Given: M is the midpoint of $\overline{AB}$

Prove: AM = $\frac{1}{2}$ AB

A ———————— M ———————— B
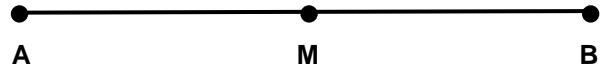
Statements	Reasons
1) M is the midpoint of $\overline{AB}$	1)
2) $\overline{AM} \cong \overline{MB}$	2)
3) $AM = MB$	3)
4) $AM + MB = AB$	4)
5) $AM + AM = MB$	5)
6) $2AM = MB$	6)
7)	Division Property of Equality

4. Given: AC = BD

Prove: AB = CD
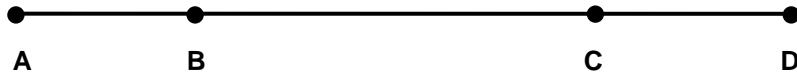
A ——— B ————————— C ——— D

Statements	Reasons
1)	1)
2) BC = BC	2) Reflexive Property of Equality
3) AC = AB + BC	3)
4) BD = CD + BC	4)
5) AB + BC = CD + BC	5)
6) AB = CD	6)