

NAME: _____

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

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

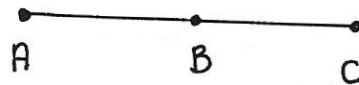


1. M is midpt of $\overline{AB}$
2. $AM = MB$
3. $AM + MB = AB$
4. $AM + AM = AB$
5. $(\frac{1}{2}) 2 AM = AB (\frac{1}{2})$
6. $AM = \frac{1}{2} (AB)$

1. Given
2. Def. of midpt
3. Segment Addition Postulate
4. substitution
5. substitution
6. Multiplication

9. Given: $2AB = AC$

Prove: $AB = BC$



1. $2AB = AC$
2. $AB + BC = AC$
3. $2AB = AB + BC$
4. $AB + AB = AB + BC$
 $-AB \qquad \qquad -AB$
5. $AB = BC$

1. Given
2. Segment Addition Postulate
3. substitution
4. substitution
5. subtraction