Write this statement as a biconditional:

A book is something that you read.

It's a book iff you can read it.

Write the two conditionals that make up the biconditional.

If it's a book, then you can read it.

If you can read it, then it's a book

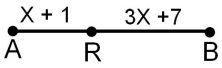
Is the original statement a good definition of a book? Why?

No, because the 2nd conditional is false.

Finish this proof that x=3 by filling in the remaining steps and the reasons that justify each step.

Given: AB = 20

Prove: X = 3

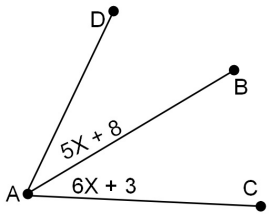


Step	Reason
1. AB = 20	1. Given
2. AR + RB = AB	2. Seg add post.
3. $x+1+3x+7=20$	3. Substitution
4. $4x+8=20$	4. Combine like terms
5. $4x+8-8=20-8$	5. Subtr Prop=
6. $4x=12$	6. Simplify
7. $\frac{4x}{4}=\frac{12}{4}$	7. Div prop =
8. $x=3$	8. Simplify

Finish this proof that x=5 by filling in the remaining steps and the reasons that justify each step.

Given: $\overline{AB}$ bisects Angle DAC

Prove: x = 5



Step	Reason
1. $\overline{AB}$ bisects Angle DAC	1. Given
2. Angle DAB ≅ Angle BAC	2. Def of bisect
3. $5x+8=6x+3$	3. Subst.
4. $8=x+3$	4. Subtraction prop =
5. $5=x$	5.
6. $x=5$	6. Symmetric prop