

Learning Target(s): I can use deductive reasoning to write an algebraic proof.
I can identify the reflexive, symmetric, and transitive properties.

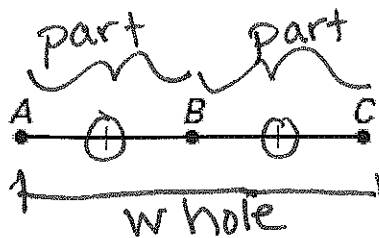
2.5 Notes: Part 2

Use a property to complete the statement.

- Alex 1. Reflexive Property of Equality: If x is a real number, then $x =$ _____
- Brianna 2. Symmetric Property of Equality: If $AB = CD$, then $CD =$ _____
- Saud 3. Transitive Property of Equality: If $m\angle E = m\angle F$ and $m\angle F = m\angle G$, then _____
- Lindsey 4. Reflexive Property of Equality: $m\angle B =$ _____
- Jason 5. Transitive Property of Equality: If $RS = GH$ and _____ $= XY$, then _____
- Katie 6. Symmetric Property of Equality: If $BC = RL$, then _____
- Morgan 7. Transitive Property of Equality: If $a = bc$ and $bc = de$, then _____
- Marcus 8. If $WX = YZ$, then $YZ = WX$. _____
- Reika 9. If $m\angle D = m\angle E$ and $m\angle E = 45^\circ$, then $m\angle D = 45^\circ$.

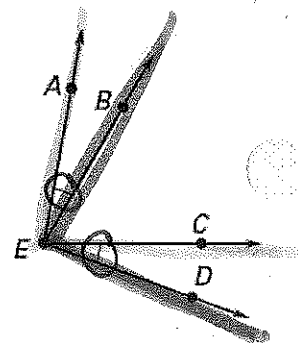
- Christian 10. If $GH = JK$, then $JK = GH$. _____
- Sophie 11. If $r = s$, and $s = 44$, then $r = 44$. _____
- Noah 12. $m\angle N = m\angle N$. _____

13. Give the reason for each statement



Statement	Reason
1. $AB = BC$	1. Given
2. $AC = AB + BC$	2. <u>If $p + p$, then $p + p = w$</u>
3. $AC = AB + AB$	3. <u>If $=$, then substitution</u>
4. $AC = 2(AB)$	4. <u>If $=$, then distributive</u>

14. Give the reason for each statement



Statement	Reason
1. $m\angle AEB = m\angle CED$	1. Given
2. $m\angle BEC = m\angle BEC$	2. <u>Reflexive</u>
3. $m\angle AEB + m\angle BEC =$ $m\angle CED + m\angle BEC$	3. <u>If add to one side, then add to other</u>
4. $m\angle AEC = m\angle AEB + m\angle BEC$	4. <u>If $p + p$, then $p + p = w$</u>
5. $m\angle BED = m\angle CED + m\angle BEC$	5. <u>If $p + p$, then $p + p = w$</u>
6. $m\angle AEC = m\angle BED$	6. <u>Transitive</u>