# Notes 2.6 – Geometric Proofs

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| ***PROPERTIES USED IN ALGEBRAIC & GEOMETRIC PROOFS*** | |
| **Reflexive** |  |
| **Symmetric** |  |
| **Substitution** |  |
| **Transitive** |  |

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| EXAMPLE 1:  Given:  Prove:   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |  |  | | EXAMPLE 2:  Given: ;  Prove:   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |

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| EXAMPLE 3: If and , then .  Given:  Prove:   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |  |  | | EXAMPLE 4:  Given:  Prove:   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |

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| 2  A  B  C  D  EXAMPLE 5:  Given: & are right angles  Prove:   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |  |  | |  |  | | EXAMPLE 6:  Given: AB ⊥ CD.  Prove: 1 and are complementary   |  |  | | --- | --- | | Statements | **Reasons** | |  |  | |  |  | |  |  | |  |  | |