# 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: $3x-8=19$Prove: $x=9$

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| Statements | **Reasons** |
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 | EXAMPLE 2: Given: $a\left(b+2\right)=45$; $a=3$Prove: $b=13$

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| EXAMPLE 3: If $7=A$ and $7=B$, then $A=B$.Given:Prove:

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| Statements | **Reasons** |
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 | EXAMPLE 4: Given: $∠1≅∠2$Prove: $∠2≅∠1$

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| Statements | **Reasons** |
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| 2$$1$$ABCDEXAMPLE 5: Given: $∠1$ & $∠2$ are right angles Prove: $∠1≅∠2$

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 | EXAMPLE 6: Given: AB ⊥ CD.Prove: $∠$1 and $∠2 $are complementary

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