4. Given: $\vec{VX}$ bisects $∠WVY$

 $\vec{VY}$ bisects $∠WVZ$

Prove: $∠WVZ ≅∠YVZ$

|  |  |
| --- | --- |
| Statements | Reasons |
| 1.  | 1.  |
| 2.  | 2. Definition of Angle Bisector |
| 3.  | 3. Definition of Angle Bisector |
| 4.  | 4. Transitive Property |

**14.Given:** $∠ABD ≅∠YXZ, ∠ABD and ∠CBD form a linear pair, ∠YXZ and ∠WXZ form a linear pair$

**Prove:** $∠CBD ≅∠WXZ$

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| **1.** $∠ABD ≅∠YXZ, ∠ABD and ∠CBD form a linear pair, ∠YXZ and ∠WXZ form a linear pair$ | **1.**  |
| **2.** $m∠ABD=m∠YXZ $ | **2.**  |
| **3.** $m∠ABD$ **+ m**$∠CBD$ **= \_\_\_\_\_\_\_**$m∠XYZ$ **+ m**$∠WXZ$ **= \_\_\_\_\_\_\_** | **3.**  |
| **4.**  | **4. Substitution** |
| **5.** $m∠ABD$ **+ m**$∠CBD $**=** $m∠ABD$ **+ m**$∠WXZ $ | **5.**  |
| **6.**  | **6. Subtraction Property** |
| **7.**  | **7. Definition of Congruency** |



15. Given: $m∠RSW=m∠TSU $

Prove: $m∠RST=m∠WSU$

|  |  |
| --- | --- |
| Statements | Reasons |
| 1.  | 1.  |
| 2. $\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_$ + \_\_\_\_\_\_\_= \_\_\_\_\_\_\_ $\\_\\_\\_\\_\\_\\_\\_\\_\\_\\_$ + \_\_\_\_\_\_\_= \_\_\_\_\_\_\_ | 2. Angle Addition Postulate |
| 3.  | 3. Substitution |
| 4. $m∠RST=m∠WSU$ | 4. Substitution |