## Chapter 3 Key Terms, Theorems, and Postulates

|  |  |
| --- | --- |
| **Angles** | **Examples** |
| Corresponding ∠s |  |
| Alternate interior ∠s |  |
| Alternate exterior ∠s |  |
| Same-side interior ∠s |  |
| \*\*Transversal |  |
|  |  |
| **Lines/Planes** | **Examples** |
| Parallel lines |  |
| Perpendicular lines |  |
| Skew lines |  |
| Parallel planes |  |



|  |  |
| --- | --- |
| **Theorem Name (short form)** | **Conclusion** |
| Corr. ∠s Post. |  |
| Alt. Int. ∠s Thm. |  |
| Alt. Ext. ∠s Thm.  |  |
| Same-side Int. ∠s Thm. |  |

 **----------------------------------------------------------------------------------------------------------
Theorems:** (given *r || s*)



|  |  |
| --- | --- |
| **Theorem Name (short form)** | ***r||s* if this is true:** |
| Converse Corr. ∠s Post. |  |
| Converse Alt. Int. ∠s Thm. |  |
| Converse Alt. Ext. ∠s Thm.  |  |
| Converse Same-side Int. ∠s Thm. |  |

 **---------------------------------------------------------------------------------------------------------------------
Converse** **Theorems:**

 (to prove *r || s*)



 **----------------------------------------------------------------------------------------------------------**

|  |  |  |
| --- | --- | --- |
| **Vocabulary Term** | **Draw a Diagram** | **Name the segment from your diagram that matches the vocabulary term** |
| **Perpendicular Bisector** |  |  |
| **Shortest Distance from a Point to a Line** |  |  |

|  |
| --- |
| **Perpendicular Line Theorems** |
| **Theorem** | **Hypothesis** | **Conclusion** |
| 2 intersecting lines form lin. pair of ≅ ∠s 🡪lines ⊥ |  |  |
| **Perpendicular Transversal Theorem:** |  |  |
| 2 lines ⊥ to same line 🡪 2 lines || |  |  |

 **----------------------------------------------------------------------------------------------------------**

|  |  |  |
| --- | --- | --- |
| **Slope** | m= | You can also say slope is the ratio of  **\_\_\_\_\_\_\_\_\_\_** to **\_\_\_\_\_\_\_\_\_\_** |

**----------------------------------------------------------------------------------------------------------**

|  |  |  |
| --- | --- | --- |
| **\_\_\_\_\_\_\_\_\_\_\_ Lines** | **have the \_\_\_\_\_\_\_\_\_ slope** | **and \_\_\_\_\_\_\_\_\_ y-intercepts** |
| **Parallel** |  |  |
| **Perpendicular** |  |  |
| **Coinciding** |  |  |
| **Intersecting \*\*** |  | --------------- |

\*\* You can solve to find where two intersecting lines cross using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
**----------------------------------------------------------------------------------------------------------**

|  |  |
| --- | --- |
| **Name** | **Equation of Line** |
| **Point-Slope Form** |  |
| **Slope-Intercept Form** |  |
| **Standard Form** |  |
| **Vertical Line** |  |
| **Horizontal Line** |  |