**Adjacent angles**

**Complementary angles**

**Pairs of Angles**

**Supplementary angles**

**Vertical angles**

**Linear Pair of Angles**

**Adjacent Angles**

|  |  |
| --- | --- |
|  | **Adjacent angles are angles that share a common side and have the same vertex, but have no interior points in common.** |

**A Linear Pair of Angles**

|  |  |
| --- | --- |
|  | **Two angles form a linear pair if and only if they are adjacent and their non-common sides are opposite rays.** |

**Sample Problem 1**: **Tell whether the angles are only adjacent, adjacent and form a linear pair or not adjacent.**

|  |  |  |  |
| --- | --- | --- | --- |
| **a.** |  | **b.** |  |
|  |  |  |  |

**Complementary and Supplementary Angles**

|  |  |
| --- | --- |
|  | **Two angles are complementary if and only if the sum of their degree measures is .** |
|  | **Two angles are supplementary if and only if the sum of their degree measures is .** |

**Sample Problem 2**: **Name a pair of adjacent complementary angles.**

|  |  |  |  |
| --- | --- | --- | --- |
| **a.** |  | **b.** |  |
|  |  |  |  |

**Sample Problem 3**: **Name a pair of adjacent supplementary angles.**

|  |  |  |  |
| --- | --- | --- | --- |
| **a.** |  | **b.** |  |
|  |  |  |  |

**Congruent angles**

|  |  |
| --- | --- |
|  | **Two angles are congruent if and only if they have the same degree measure.** |
|  |

**Vertical Angles**

|  |  |
| --- | --- |
|  | **Two angles are vertical if and only if they are two nonadjacent angles formed by a pair of intersecting lines.**  **Vertical angles are congruent.** |
|  |

**Sample Problem 4**: **Find the indicated angle measures.**

|  |  |  |
| --- | --- | --- |
| **a.** | **Find ,** |  |
| **b.** | **Find ,** |  |