

1.5 Angle Relationships

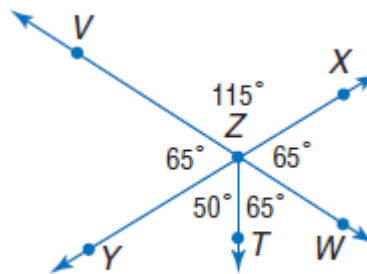
Name _____

Date _____ Hour _____

- 1) What are adjacent angles?
- 2) What are vertical angles?
- 3) What is a linear pair?
- 4) Do complementary angles have to be adjacent? Example? Counterexample?
- 5) How are supplementary angles different from complementary angles?
- 6) Describe perpendicular. Make a sketch.
- 7) Two angles are supplementary. One angle measures 12° more than the other. Find their measures.

8) Name a pair of obtuse vertical angles in this pic.

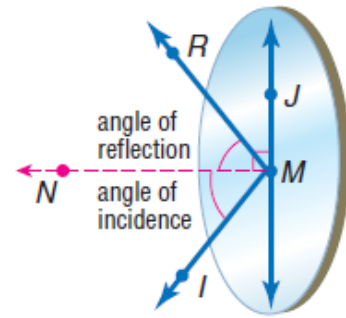
9) Name a pair of acute adjacent angles in this pic.



Are the following statements *always*, *sometimes*, or *never* true?

- 10) If two angles are supplementary and one is acute, then the other is obtuse.
- 11) If two angles are complementary, then they are both acute angles.
- 12) If $\angle A$ is supplementary to $\angle B$ and $\angle B$ is supplementary to $\angle C$ then $\angle A$ is supplementary to $\angle C$.

- 13) **PHYSICS** As a ray of light meets a mirror, the light is reflected. The angle that the light strikes the mirror is the *angle of incidence*. The angle that the light is reflected is the *angle of reflection*. The angle of incidence and the angle of reflection are congruent. In the diagram at the right, if $m\angle RMI = 106$, find the angle of reflection and $m\angle RMJ$.



- 14) Find the distance from A(-8, 9) to G(4, 7).

- 15) Construct a perpendicular bisector of this segment.

