Theorems Involving Angles

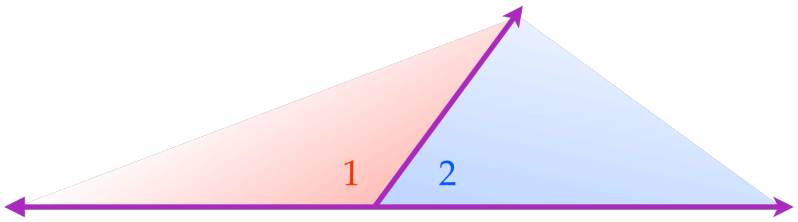
Name _____

Date _____ Period _____

Linear Pair Theorem:

If two angles form a Linear Pair,
then those angles are supplementary.

∠1 and ∠2 form a linear pair



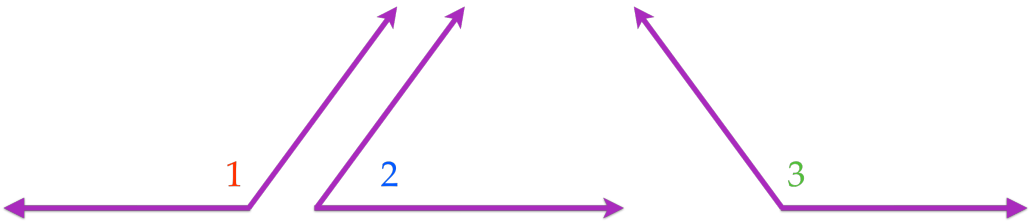
∠1 and ∠2 are supplementary

Supplement Congruent Theorem:

If two angles are supplementary to the same angle,
then those two angles are congruent.

∠1 and ∠2 are supplementary

∠2 and ∠3 are supplementary



∠1 and ∠3 are both supplements of ∠2

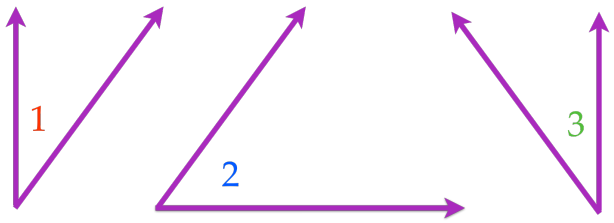
∠1 ≅ ∠3

Complement Congruent Theorem:

If two angles are complementary to the same angle,
then those two angles are congruent.

∠1 and ∠2 are complementary

∠2 and ∠3 are complementary



∠1 and ∠3 are both complements of ∠2

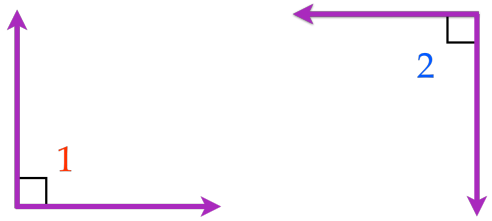
∠1 ≅ ∠3

Right Angle Theorem:

If two angles are right angles,
then those two angles are congruent.

∠1 is a right angle

∠2 is a right angle

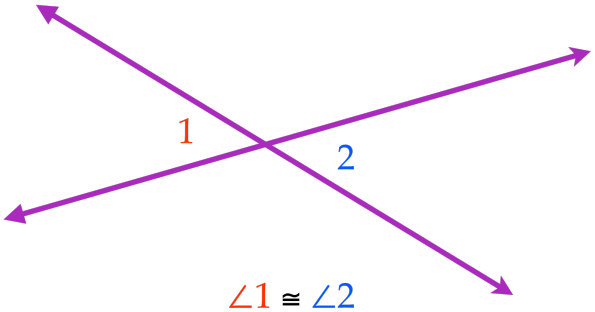


∠1 ≅ ∠2

Vertical Angle Theorem:

If two angles are vertical angles,
then those two angles are congruent.

∠1 and ∠2 are vertical angles

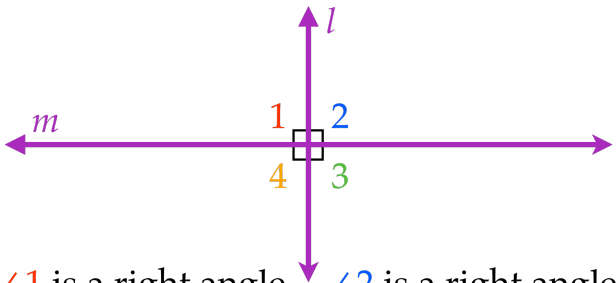


∠1 ≅ ∠2

Perpendicular Lines Theorem:

If two line are perpendicular to each other,
then those two lines intersect to form four right angles.

Line l ⊥ Line m



∠1 is a right angle ∠2 is a right angle
∠4 is a right angle ∠3 is a right angle