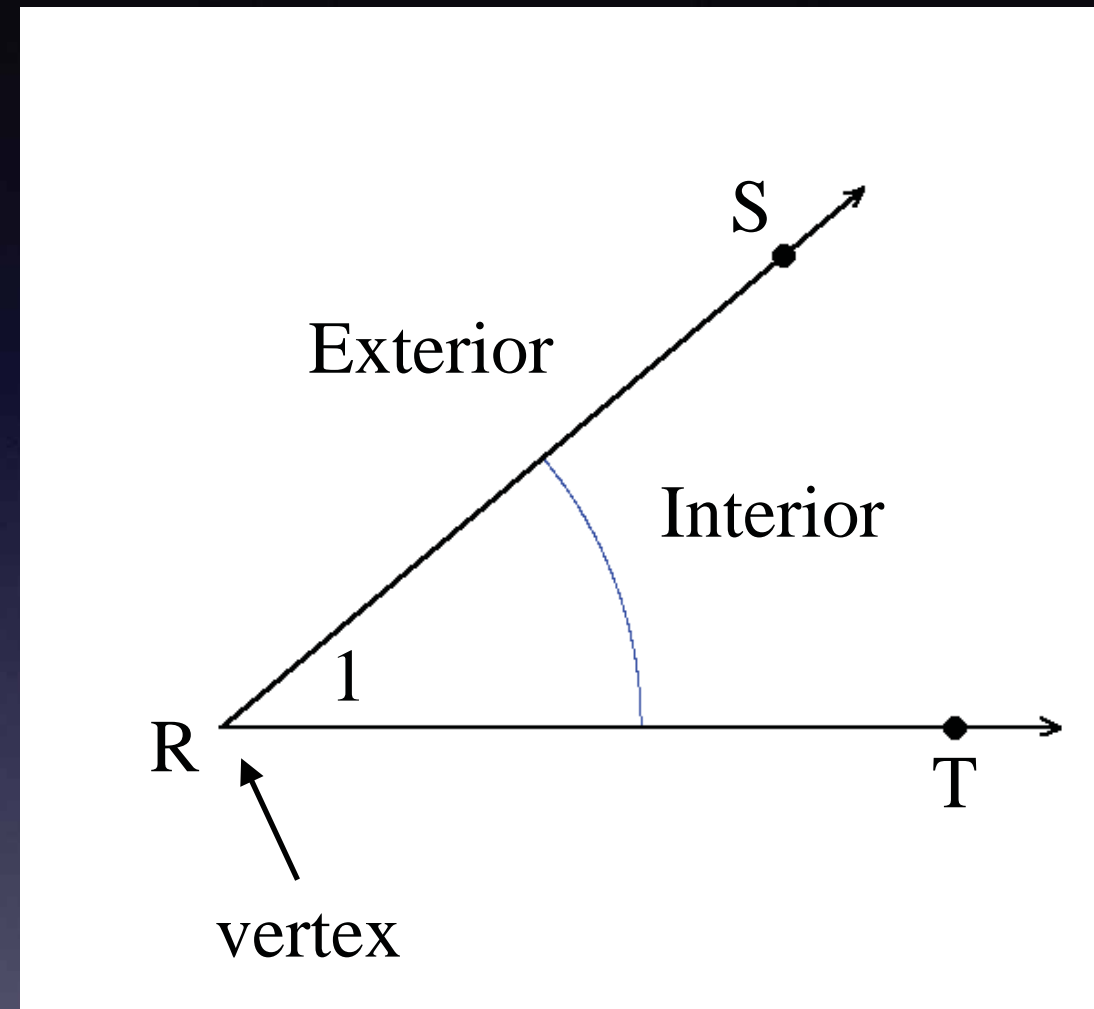# Section 1-5: Measuring Angles
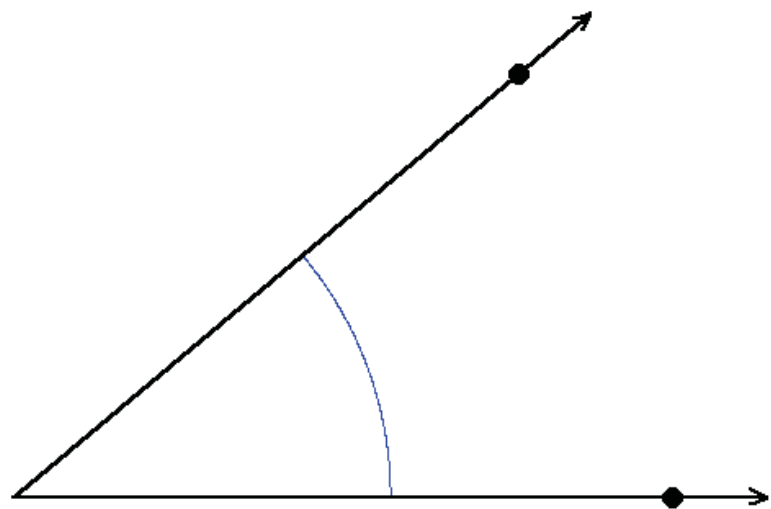
Naming Angles

- Vertex*

- Point on each ray & vertex

- Number
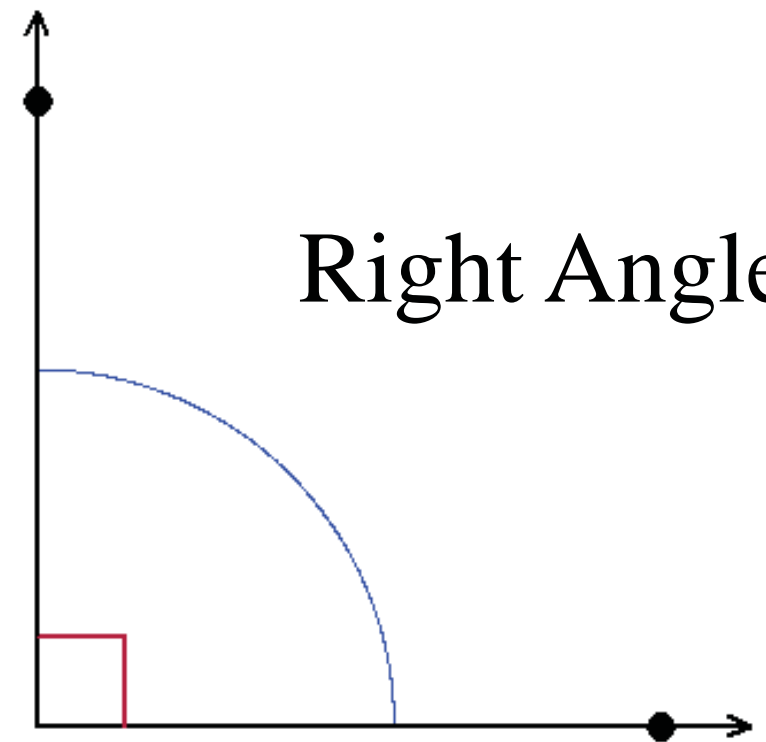

*you cannot name an angle by its vertex if the point is the vertex of more than one angle
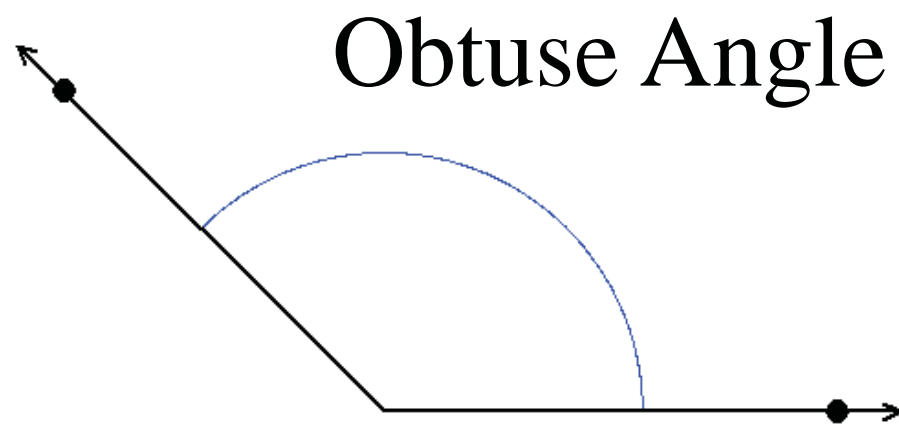
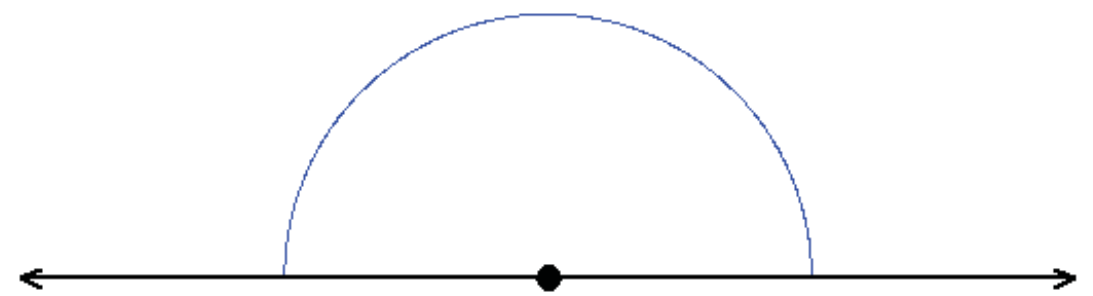$$\angle SRT \quad \angle TRS \quad \angle R \quad \angle 1$$
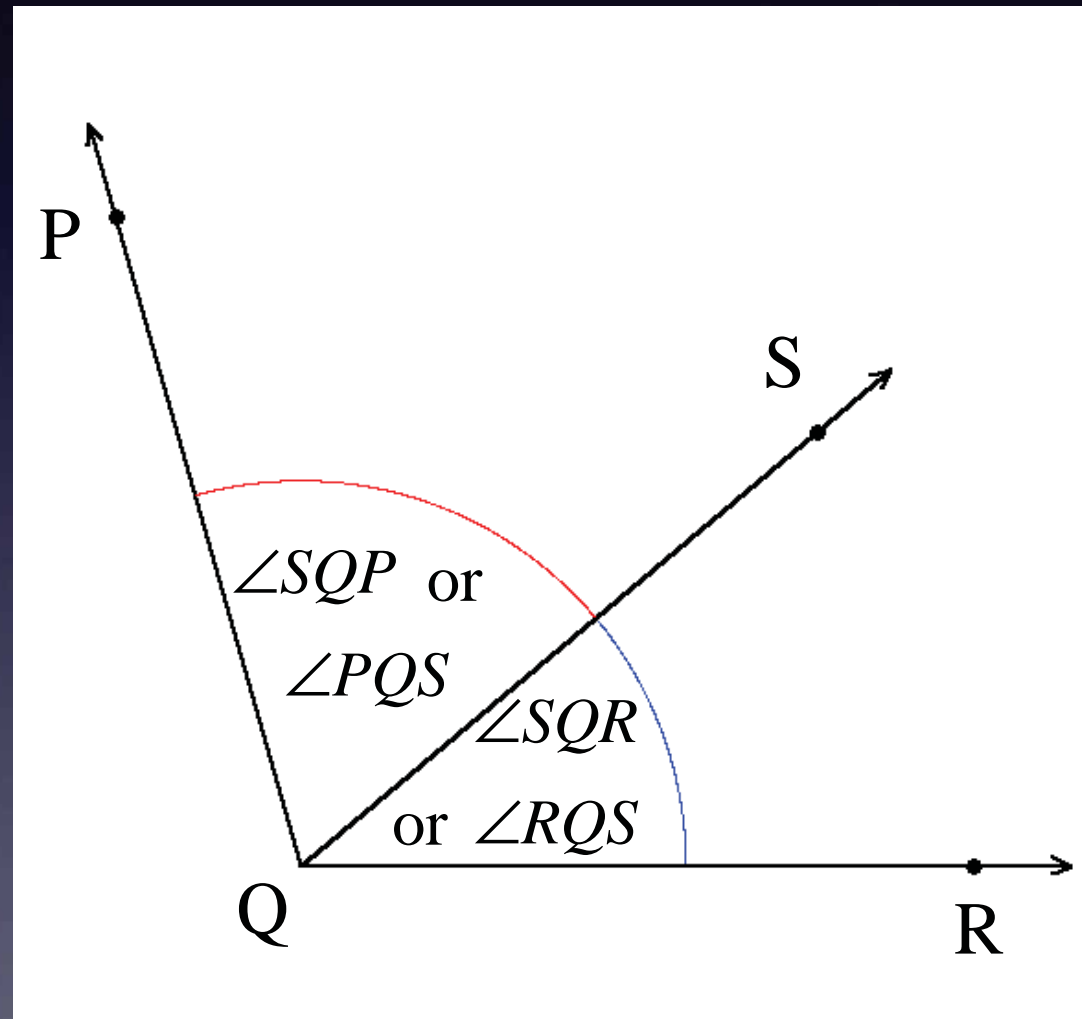
Acute Angle

Right Angle

Obtuse Angle

Straight Angle

Angle Addition Postulate

If S is in the interior of $\angle PQR$, then

Because Q is the the vertex of both angles, we *cannot* describe either of them as $\angle Q$
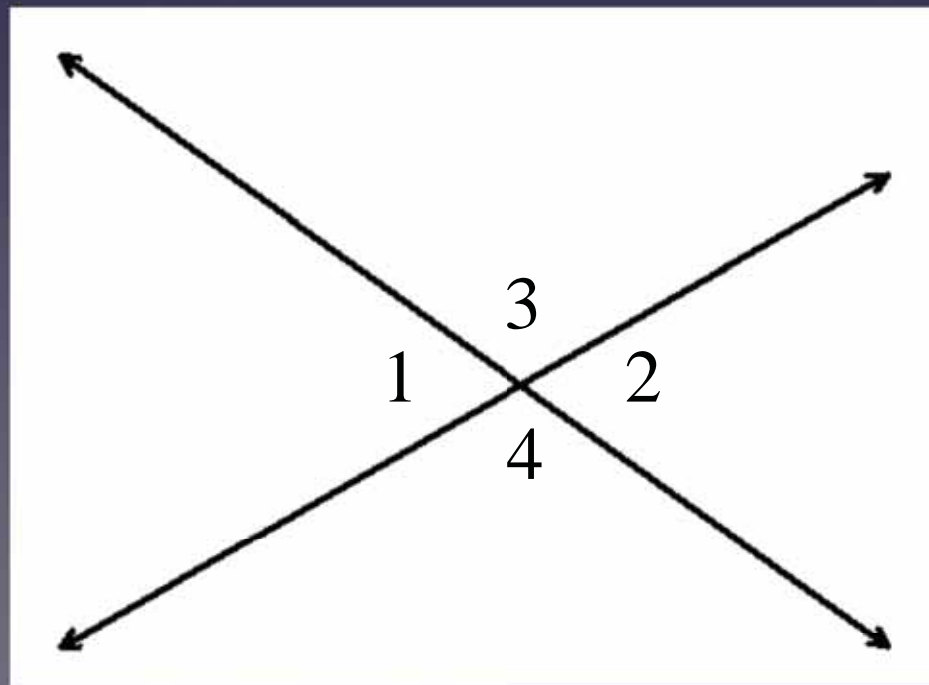
Like the Segment Addition Postulate, we're sort of stating the obvious here.

P

S

$\angle SQP$ or

$\angle PQS$

$\angle SQR$

or $\angle RQS$

Q

R

$m\angle PQS + m\angle SQR = m\angle PQR$

Section 1-6:
Describing Pairs of Angles

Vertical Angles

- sides form 2 pairs of opposite rays

- are *congruent*

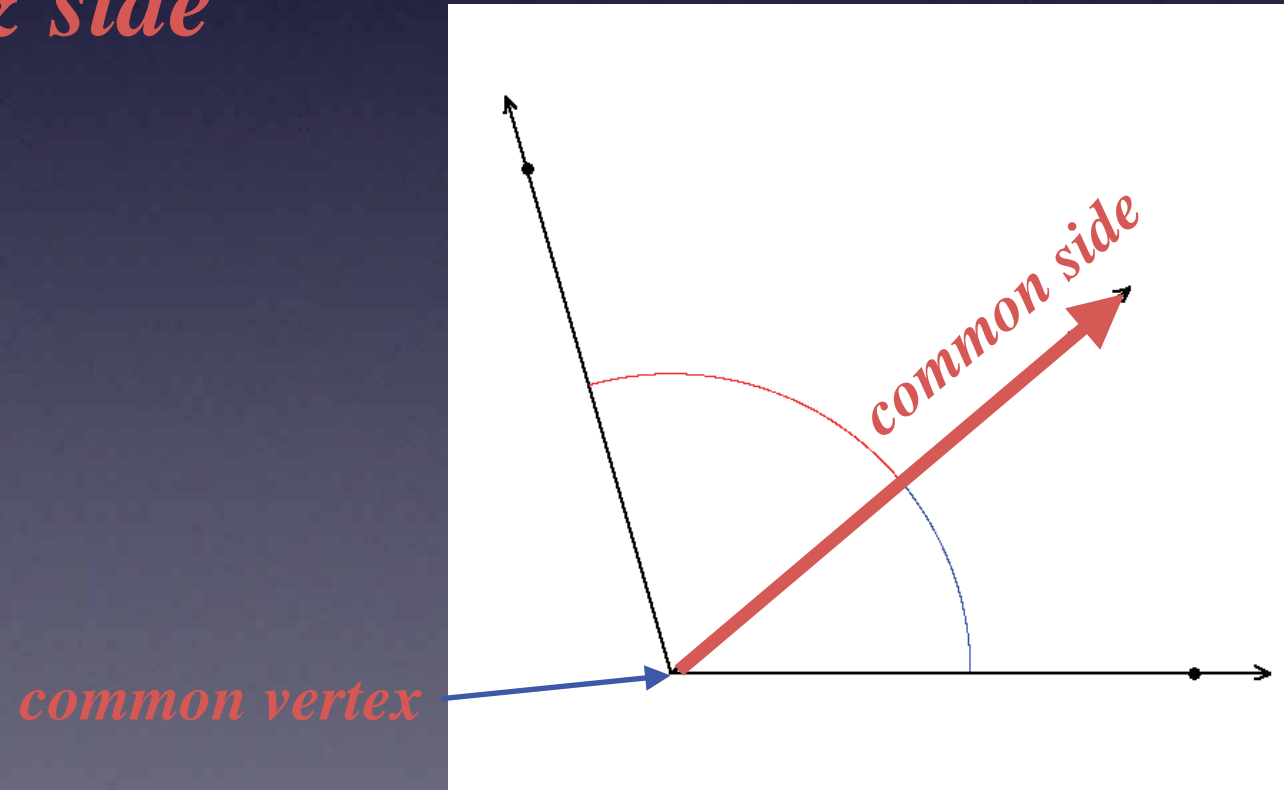- sit directly *across from one another*

$$\angle 1 \cong \angle 2$$
$$\angle 3 \cong \angle 4$$

Adjacent Angles

- 2 angles in the same plane

- *common vertex & side*

Complementary Angles

- *add up to 90º*
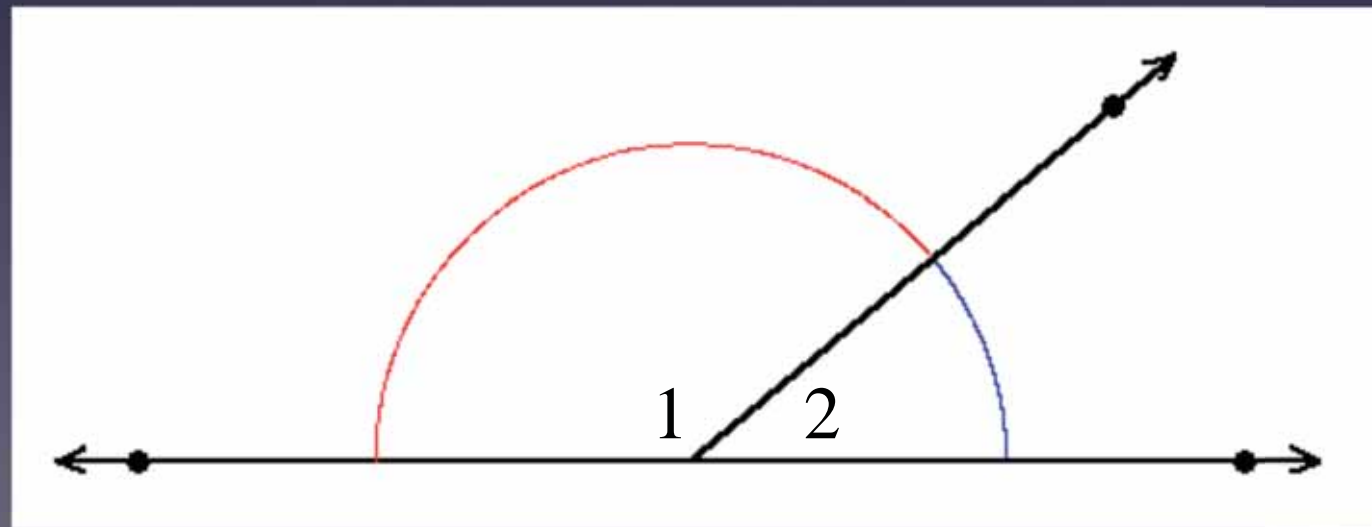
- adjacent or non-adjacent angles

Supplementary Angles

- *add up to 180º*

- adjacent or non-adjacent angles

When two supplementary angles are adjacent we have a name for them

Linear Pair

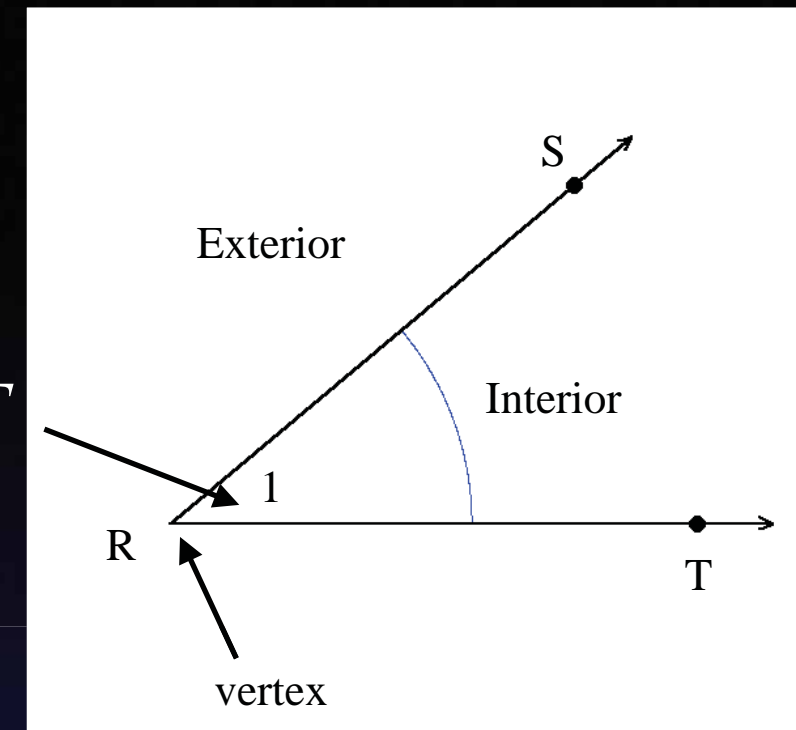- *adjacent* angles whose non-common sides are opposite rays

- *add up to 180º*

$m\angle 1 + m\angle 2 = 180°$

So to recap

Know the terms so you will understand them when you see and hear them…and you will see and hear them a lot

$\angle 1 \ or \ \angle SRT$

S
Exterior
Interior
1
R
T
vertex

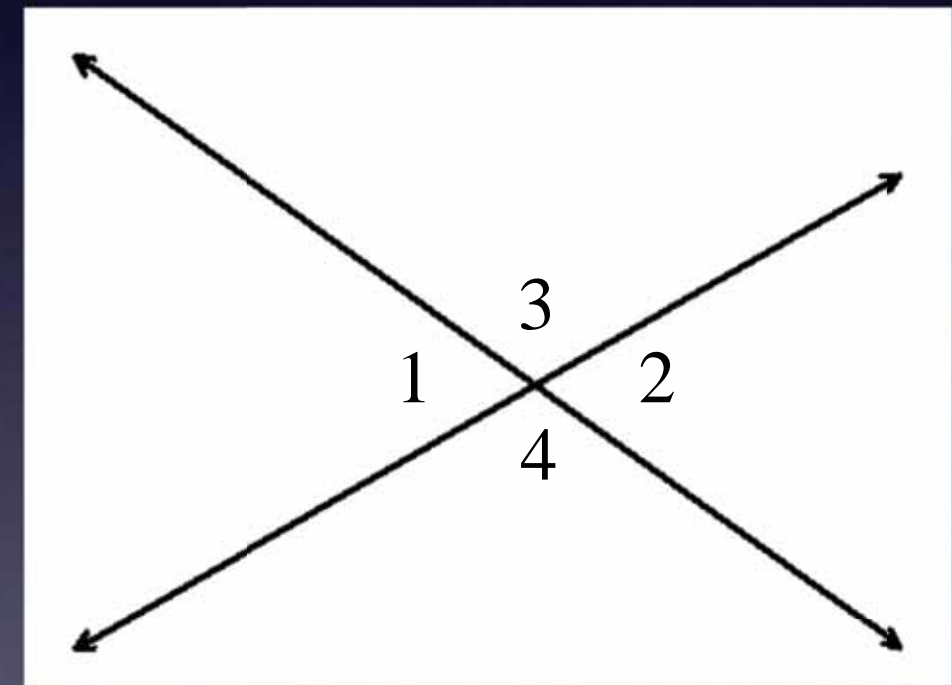$\angle 1$ is *adjacent* to $\angle 3$
$\angle 1$ is *adjacent* to $\angle 4$
$\angle 2$ is *adjacent* to $\angle 3$
$\angle 2$ is *adjacent* to $\angle 4$

Vertical Angles

$\angle 1 \cong \angle 2$

$\angle 3 \cong \angle 4$

3
1   2
4

Complimentary Angles add up to 90⁰

Supplementary Angles add up to 180⁰

A Linear Pair is supplementary

1   2