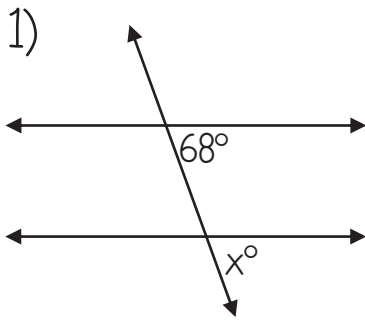# Angle Pairs Created by Parallel Lines Cut by a Transversal
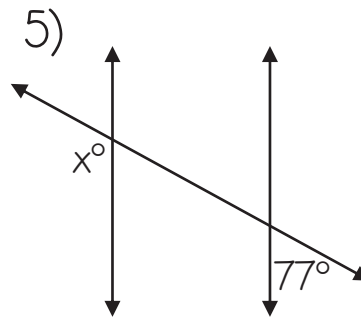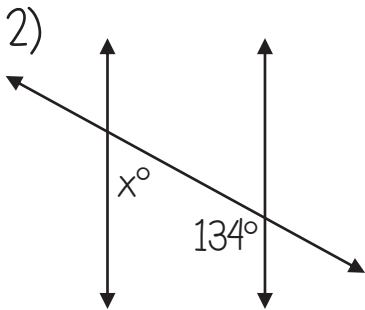
For each set of angles name the angle pair and find the missing measurement

1) 68° x°

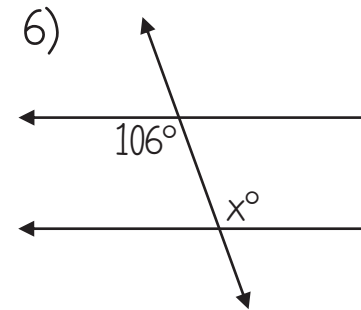Type of angle pair
Corresponding
These angles are
_Congruent____
so…x=__68°__

5) x° 77°

Type of angle pair
_Same-Side Exterior
These angles are
_Supplementary__
so…x=_103°___

2) x° 134°

Type of angle pair
_Same-Side Interior
These angles are
_Supplementary__
so…x=_46°__

6) 106° x°

Type of angle pair
_Alternate Interior
These angles are
_Congruent____
so…x=_106°___

3) 120° x°
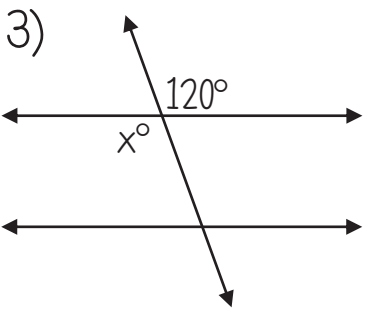
Type of angle pair
_Vertical____
These angles are
_Congruent____
so…x=_120°____

7) 74° x°
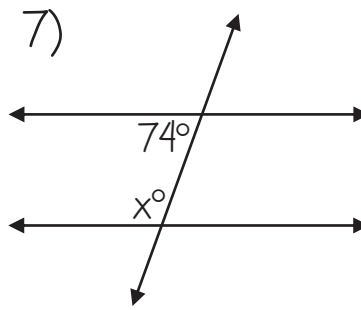
Type of angle pair
_Same-Side Interior
These angles are
_Supplementary__
so…x=_106°___

4) 101° x°
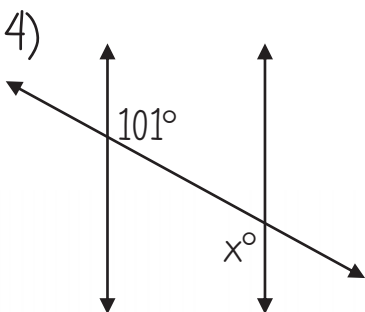
Type of angle pair
_Alternate Interior
These angles are
_Congruent____
so…x=_101°____

8) 142° x°
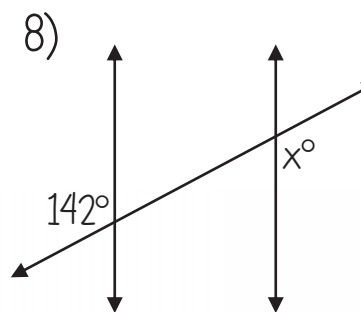
Type of angle pair
_Alternate Exterior
These angles are
_Congruent____
so…x=_142°___

Name_____Key_____ Period: A B C D F Date: _____ #_____

Skills Practice – Line and Angle Relationships

**1** Use the map to answer each question. Assume the streets extend beyond the edges of the map.
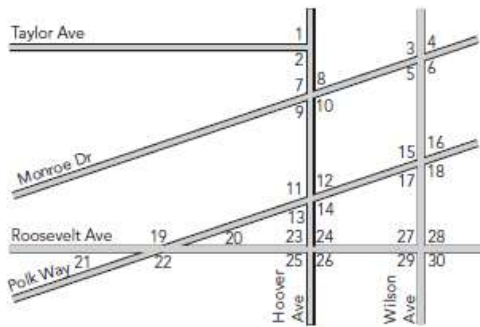
a. Identify all the angles that are **same-side exterior** to ∠11.

$\angle 16$ & $\angle 25$

b. Identify all the angles that are **alternate interior** to ∠11.

$\angle 10$

c. Identify all the angles that are **corresponding to** ∠11.

$\angle 7$ & $\angle 15$ & $\angle 23$

d. Identify all the angles that are **vertical** to ∠11.

$\angle 14$

2 In the diagram, transversal t intersects lines p and q. Classify each pair of angles as vertical, linear, corresponding, same-side exterior, same-side interior, alternate interior, or alternate exterior.
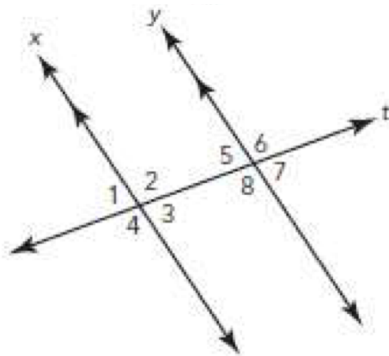
a. angle 1 and angle 2

Supplementary

b. angle 1 and angle 3

Vertical

c. angle 1 and angle 6

Same-Side exterior

d. angle 3 and angle 7

Corresponding

e. angle 2 and angle 8

alternate interior

f. angle 1 and angle 7

alternate exterior

g. angle 4 and angle 7

Same-Side exterior

h. angle 6 and angle 8

Vertical

i. angle 3 and angle 4

Supplementary

j. angle 2 and angle 6

Corresponding

k. angle 2 and angle 5

Same-Side Interior

l. angle 3 and angle 5

alternate interior

3 Use the diagram to answer each question.
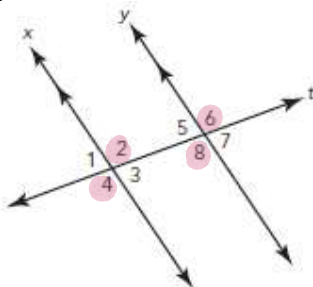
a. Identify the angles that are congruent to ∠6.

$\angle 2, \angle 4, \angle 8$

b. Identify the angles that are supplementary to ∠3.

$\angle 4, \angle 2$

c. Identify the angles that are supplementary to ∠6.

$\angle 5, \angle 7$

d. Identify the angles that are congruent to ∠3.

$\angle 1, \angle 5, \angle 7$