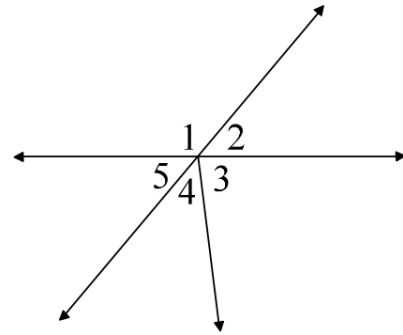


Name \_\_\_\_\_

## Pairs of Angles

Identify the angles as only adjacent, a linear pair, vertical, or none of the above.

1.  $\angle 1$  and  $\angle 5$  \_\_\_\_\_
2.  $\angle 2$  and  $\angle 5$  \_\_\_\_\_
3.  $\angle 3$  and  $\angle 5$  \_\_\_\_\_
4.  $\angle 1$  and  $\angle 4$  \_\_\_\_\_
5.  $\angle 3$  and  $\angle 4$  \_\_\_\_\_



Given  $m\angle A = 23^\circ$ ,  $m\angle B = (x + 15)^\circ$ , and  $m\angle C = (3y - 8)^\circ$ , find the measure of each of the following.

6. The complement of  $\angle A$  \_\_\_\_\_
7. The supplement of  $\angle A$  \_\_\_\_\_
8. The supplement of  $\angle B$  \_\_\_\_\_
9. The supplement of  $\angle C$  \_\_\_\_\_
10. The complement of  $\angle C$  \_\_\_\_\_
11. The complement of  $\angle B$  \_\_\_\_\_

$\angle J$  and  $\angle K$  are complementary. Find the measures of both angles.

12.  $m\angle J = (7x + 15)^\circ$ ,  $m\angle K = (4x + 9)^\circ$  \_\_\_\_\_
13.  $m\angle J = (20x - 4)^\circ$ ,  $m\angle K = (4x + 22)^\circ$  \_\_\_\_\_

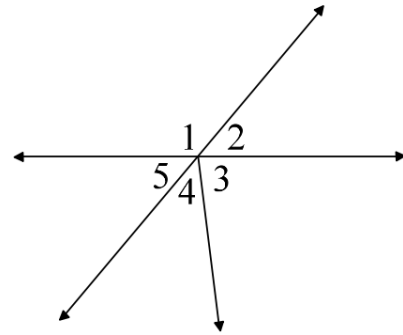
$\angle X$  and  $\angle Y$  are supplementary. Find the measures of both angles.

14.  $m\angle X = (12x - 16)^\circ$ ,  $m\angle Y = (17x + 22)^\circ$  \_\_\_\_\_
15.  $m\angle X = (11x - 9)^\circ$ ,  $m\angle Y = (6x - 15)^\circ$  \_\_\_\_\_

## Pairs of Angles Answers

Identify the angles as only adjacent, a linear pair, vertical, or none of the above.

1.  $\angle 1$  and  $\angle 5$     **linear pair**
2.  $\angle 2$  and  $\angle 5$     **vertical**
3.  $\angle 3$  and  $\angle 5$     **none**
4.  $\angle 1$  and  $\angle 4$     **none**
5.  $\angle 3$  and  $\angle 4$     **adjacent only**



Given  $m\angle A = 23^\circ$ ,  $m\angle B = (x + 15)^\circ$ , and  $m\angle C = (3y - 8)^\circ$ , find the measure of each of the following.

6. The complement of  $\angle A$      **$67^\circ$**
7. The supplement of  $\angle A$      **$157^\circ$**
8. The supplement of  $\angle B$      **$(165 - x)^\circ$**
9. The supplement of  $\angle C$      **$(188 - 3y)^\circ$**
10. The complement of  $\angle C$      **$(98 - 3y)^\circ$**
11. The complement of  $\angle B$      **$(75 - x)^\circ$**

$\angle J$  and  $\angle K$  are complementary. Find the measures of both angles.

12.  $m\angle J = (7x + 15)^\circ$ ,  $m\angle K = (4x + 9)^\circ$      **$m\angle J = 57^\circ$ ,  $m\angle K = 33^\circ$**
13.  $m\angle J = (20x - 4)^\circ$ ,  $m\angle K = (4x + 22)^\circ$      **$m\angle J = 56^\circ$ ,  $m\angle K = 34^\circ$**

$\angle X$  and  $\angle Y$  are supplementary. Find the measures of both angles.

14.  $m\angle X = (12x - 16)^\circ$ ,  $m\angle Y = (17x + 22)^\circ$      **$m\angle X = 56^\circ$ ,  $m\angle Y = 124^\circ$**
15.  $m\angle X = (11x - 9)^\circ$ ,  $m\angle Y = (6x - 15)^\circ$      **$m\angle X = 123^\circ$ ,  $m\angle Y = 57^\circ$**