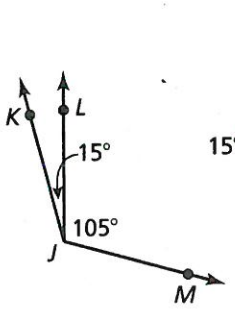
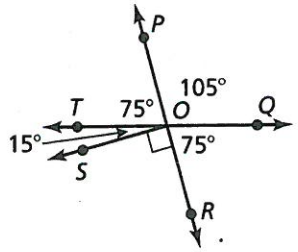
Name Classwork - Blank Date

1.6 **Notetaking with Vocabulary (continued)**

Extra Practice

In Exercises 1 and 2, use the figure.





1. Name the pair(s) of adjacent complementary angles.

2. Name the pair(s) of nonadjacent supplementary angles.

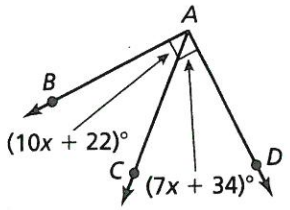
In Exercises 3 and 4, find the angle measure.

3. $\angle A$ is a complement of $\angle B$ and $m\angle A = 36°$. Find $m\angle B$.

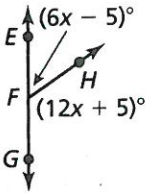
4. $\angle C$ is a supplement of $\angle D$ and $m\angle D = 117°$. Find $m\angle C$.

In Exercises 5 and 6, find the measure of each angle.

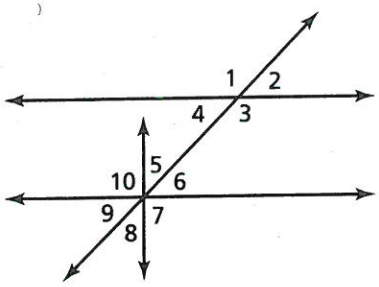
5.



6.



In Exercises 7–9, use the figure.



7. Identify the linear pair(s) that include $\angle 1$.

8. Identify the vertical angles.

9. Are $\angle 6$ and $\angle 7$ a linear pair? Explain.

Name_____ Date_____

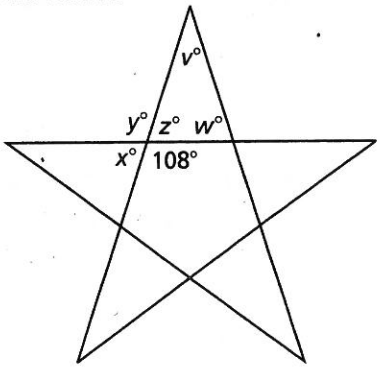
1.6 Describing Pairs of Angles

For use with Exploration 1.6

Essential Question How can you describe angle pair relationships and use these descriptions to find angle measures?

1 EXPLORATION: Finding Angle Measures

Work with a partner. The five-pointed star has a regular pentagon at its center.



a. What do you notice about the following angle pairs?

$x°$ and $y°$

$y°$ and $z°$

$x°$ and $z°$

b. Find the values of the indicated variables. Do not use a protractor to measure the angles.

$x =$

$y =$

$z =$

$w =$

$v =$

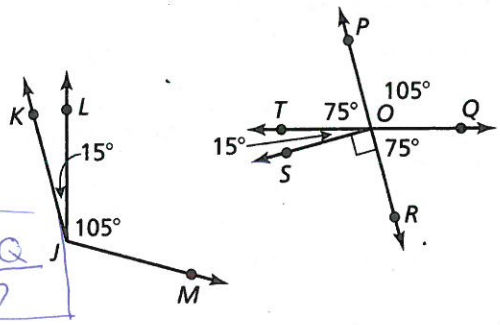
Explain how you obtained each answer.

Name Classwork + KEY Date

1.6 Notetaking with Vocabulary (continued)

Extra Practice

In Exercises 1 and 2, use the figure.



1. Name the pair(s) of adjacent complementary angles.

∠TOP, ∠TOS

2. Name the pair(s) of nonadjacent supplementary angles.

∠TOP, ∠LJM or ∠KJL and ∠SOQ ???

In Exercises 3 and 4, find the angle measure.

3. $\angle A$ is a complement of $\angle B$ and $m\angle A = 36°$. Find $m\angle B$.

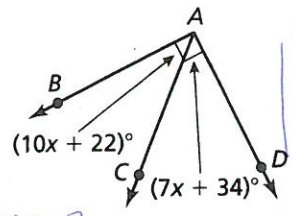
$m\angle B = 54°$

4. $\angle C$ is a supplement of $\angle D$ and $m\angle D = 117°$. Find $m\angle C$.

$m\angle C = 63°$

In Exercises 5 and 6, find the measure of each angle.

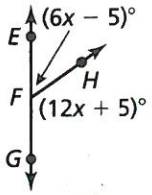
5.



$m\angle BAC = 42°$
$m\angle CAD = 48°$

$x = 2$

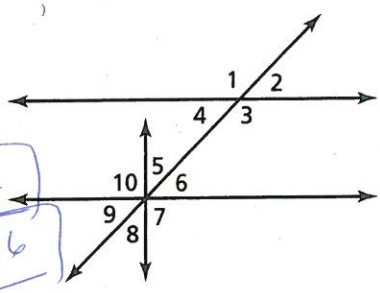
6.



$m\angle EFH = 55°$
$m\angle HFG = 125°$

$x = 10$

In Exercises 7–9, use the figure.



7. Identify the linear pair(s) that include $\angle 1$.

∠1, ∠2 ∠1, ∠4

8. Identify the vertical angles.

∠1, ∠3 ∠2, ∠4 ∠10, ∠7 ∠5, ∠8

9. Are $\angle 6$ and $\angle 7$ a linear pair? Explain.

∠9, ∠6

No! They are adjacent, but are not supplementary (non common sides aren't opposite rays)

Name_____ Date_____

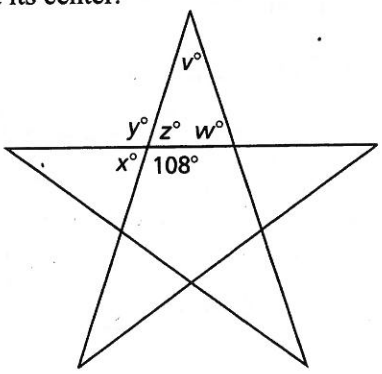
1.6 Describing Pairs of Angles

For use with Exploration 1.6

Essential Question How can you describe angle pair relationships and use these descriptions to find angle measures?

1 EXPLORATION: Finding Angle Measures

Work with a partner. The five-pointed star has a regular pentagon at its center.



a. What do you notice about the following angle pairs?

$x°$ and $y°$

$y°$ and $z°$

$x°$ and $z°$

b. Find the values of the indicated variables. Do not use a protractor to measure the angles.

$x =$

$y =$

$z =$

$w =$

$v =$

Explain how you obtained each answer.