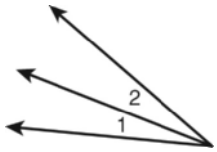
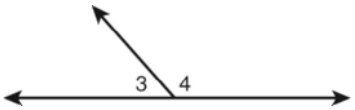
Name _____ Date _____ Class _____

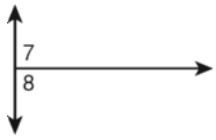
LESSON 1-4

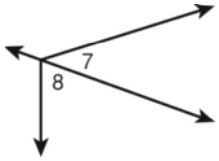
Reteach

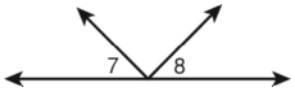
Pairs of Angles

Angle Pairs		
Adjacent Angles	**Linear Pairs**	**Vertical Angles**
have the same vertex and share a common side	adjacent angles whose noncommon sides are opposite rays	nonadjacent angles formed by two intersecting lines
 ∠1 and ∠2 are adjacent.	 ∠3 and ∠4 are adjacent and form a linear pair.	 ∠5 and ∠6 are vertical angles.

Tell whether ∠7 and ∠8 in each figure are only adjacent, are adjacent and form a linear pair, or are not adjacent.

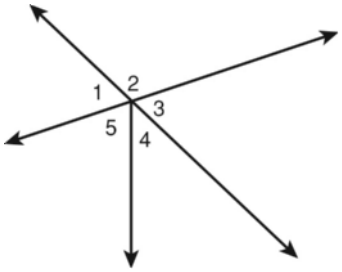
1. 

2. 

3. 

_____ _____ _____

Tell whether the indicated angles are only adjacent, are adjacent and form a linear pair, or are not adjacent.

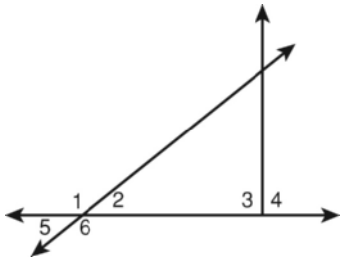


4. ∠5 and ∠4 _____

5. ∠1 and ∠4 _____

6. ∠2 and ∠3 _____

Name each of the following.



7. a pair of vertical angles _____

8. a linear pair _____

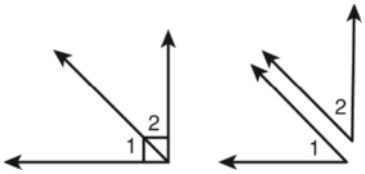
9. an angle adjacent to ∠4 _____

Name _____ Date _____ Class _____

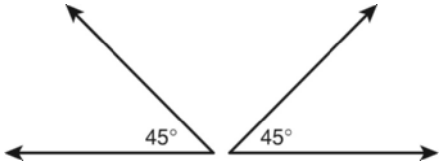
LESSON 1-4

Reteach

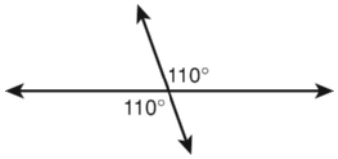
Pairs of Angles *continued*

Angle Pairs	
Complementary Angles	**Supplementary Angles**
sum of angle measures is 90°	sum of angle measures is 180°
 $m\angle 1 + m\angle 2 = 90°$	 $m\angle 3 + m\angle 4 = 180°$
In each pair, $\angle 1$ and $\angle 2$ are complementary.	In each pair, $\angle 3$ and $\angle 4$ are supplementary.

Tell whether each pair of labeled angles is complementary, supplementary, or neither.

10. 

_____

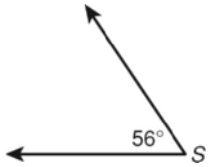
11. 

_____

Find the measure of each of the following angles.

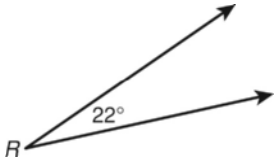
12. complement of $\angle S$ _____

13. supplement of $\angle S$ _____



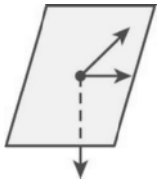
14. complement of $\angle R$ _____

15. supplement of $\angle R$ _____



16. $\angle LMN$ and $\angle UVW$ are complementary. Find the measure of each angle if $m\angle LMN = (3x + 5)°$ and $m\angle UVW = 2x°$.

_____

4. The measures of the vertical angles are equal.
5. If $m\angle X + m\angle Y = 90°$ and $m\angle Z + m\angle Y = 90°$, then $m\angle X$ and $m\angle Z$ are both equal to $90° - m\angle Y$. So $m\angle X = m\angle Z$. Two angles whose measures are equal are congruent.
6. Possible answer: $\angle ADB$ and $\angle ADC$
7. 
8. 60°
9. 45°
10. 72°

Reteach

1. adjacent and form a linear pair
2. only adjacent
3. not adjacent
4. only adjacent
5. not adjacent
6. adjacent and form a linear pair
7. Possible answers: $\angle 1$ and $\angle 6$, $\angle 2$ and $\angle 5$
8. Possible answers: $\angle 1$ and $\angle 2$; $\angle 1$ and $\angle 5$; $\angle 5$ and $\angle 6$; $\angle 6$ and $\angle 2$
9. $\angle 3$
10. complementary
11. neither
12. 34°
13. 124°
14. 68°
15. 158°
16. $m\angle LMN = 56°$; $m\angle UVW = 34°$

Challenge

1. 52°14′24″
2. 5°12′
3. 27°37′30″
4. 64°48′
5. Sample answer: $\angle KLM$ and $\angle MLN$
6. Sample answer: $\angle KLH$ and $\angle MLN$
7. $180 - (3x + 2)°$ or $(178 - 3x)°$
8. Sample answer: $\angle HCK$ and $\angle RCQ$

Problem Solving

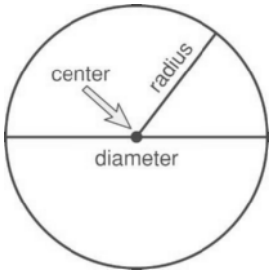
1. Sample answer: $\angle ALB$ and $\angle BLC$
2. Sample answer: $\angle AML$ and $\angle YML$
3. 45°; they are vertical angles.
4. 45°; the angles are supplementary.
5. Sample answer: $\angle ABM$, $\angle MBK$, and $\angle KBC$
6. C
7. G
8. A

Reading Strategies

1. complementary
2. vertical
3. supplementary
4. linear or supplementary
5. adjacent
6. complementary

LESSON 1-5

Practice A

1. side lengths
2. $P = 2\ell + 2w$
3. area
4. $A = \frac{1}{2}bh$
5. 30 yd
6. 54 yd^2
7. 24 cm
8. 24 cm^2
9. diameter
10. center
11. twice
12. 

13. $A = \pi r^2$
14. around
15. $C = 2\pi r$ or $C = \pi d$

Practice B

1. 12 ft
2. 6 ft^2
3. 2.4 ft or $2\frac{2}{5}$ ft
4. $P = 9.6$ m; $A = 5.76$ m^2
5. $P = 2x + 20$; $A = 7x + 21$
6. circumference
7. $C \approx 44$ mi; $A \approx 154$ mi^2
8. $C \approx 9.42$ cm; $A \approx 7.065$ cm^2
9. $C \approx 2\pi(x + 1)$; $A \approx \pi(x^2 + 2x + 1)$
10. 2 in.
11. 19 m