Warm-up

Classify each angle as acute, obtuse, right, or straight.

1)  obtuse

2)  right

3)  obtuse

4)  acute

5)  acute

6)  obtuse

Daily HW Check

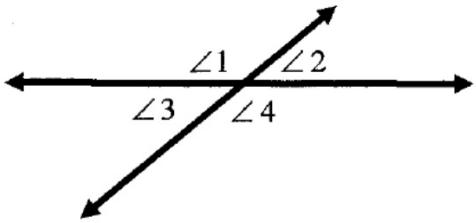
Box 5)

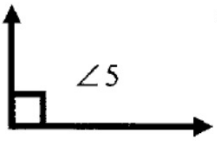
Box 6)

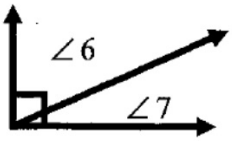
Angle Relationship Vocabulary

Name: _____

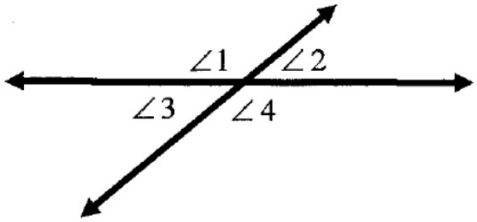
Date: _____







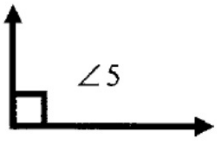
Word	Definition and Properties What does this mean? What does it tell us about the angle(s)?	At Least Two Examples Draw your own picture. Or, you may use the angles in the diagram as examples. Give as many as you can
Angle	formed by two rays with a common point	 ∠B or ∠ABC
Acute Angle	∠ that measures less than 90°	∠2, ∠3, ∠6, ∠7
Right Angle	∠ that measures 90°	∠5

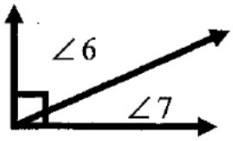


Angle Relationship Vocabulary

Name: _____

Date: _____





Obtuse Angle	∠ that measures greater than 90°, but less than 180°	∠1, ∠4
Straight Angle	∠ that measures 180°	←→
Adjacent Angles	∠'s that share a vertex and common side	∠6 & ∠7, ∠1 & ∠2, ∠1 & ∠3, ∠3 & ∠4, ∠2 & ∠4
Complementary Angles	∠'s that add and equal 90°	∠6 & ∠7

Angle Relationship Vocabulary

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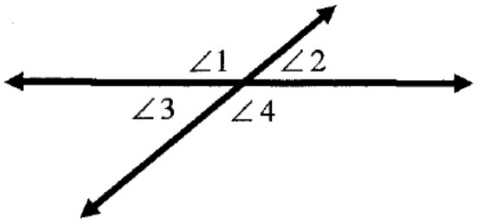
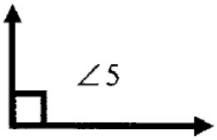
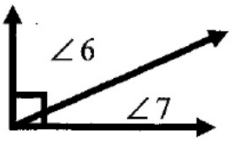
Date: _____







Complementary Angles		
Supplementary Angles	∠'s that add and equal 180°	∠1 & ∠2, ∠3 & ∠4, ∠1 & ∠3 ∠2 & ∠4
Congruent Angles	≅ ∠'s that are equal	
Vertical Angles are ≅	∠'s that are across from each other	∠1 & ∠4, ∠2 & ∠3

ANGLES & TRANSVERSALS

Angle ~ formed by 2 rays (sides) with a common endpoint called the vertex.

Acute Angle ~ greater than 0° but less than 90°

Obtuse Angle ~ greater than 90° but less than 180

∠AEC & ∠CEB

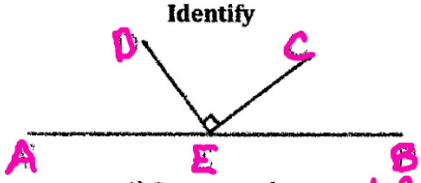
Right Angle ~ is 90°

The measure of a **straight angle** is 180°.

Complementary angles are 2 angles who add up to 90°.

Supplementary angles are 2 angles who add up to 180°.

Classifying Angles
Identify



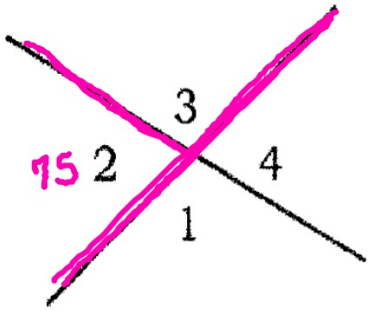
1) 2 acute angles ∠AED, ∠CE
2) 2 obtuse angles ∠AEC, ∠BE
← 3) a pair of supplementary angles
4) straight line ∠AEB

Adjacent Angles ~ have a common vertex and a common side.
**They are side by side!

Congruent Angles ~ have the same measure.

Vertical Angles ~ are the ∠'s across from one another.
**Vertical angles are congruent.

Finding Angle Measurements



If m ∠ 2 = 75°, find m ∠ 3.

Name 2 adjacent angles: 1 & 2, and 3 & 4.

Name 2 vertical angles: 2 & 4, and 1 & 3.

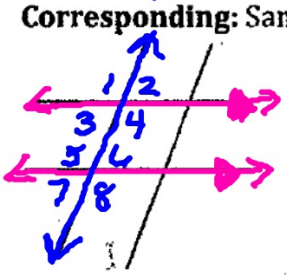
> $m\angle 3 = 180 - 75 = 105^\circ$

Transversal: a line that intersects 2 or more parallel lines

Alternate Interior Angles: ∠3 & ∠6 ≅ and ∠4 & ∠5

Alternate Exterior Angles: ∠1 & ∠8 ≅ and ∠2 & ∠7

Corresponding: Same **Position** are ≅



∠'s can't be sidebyside

1st word: relation to transversal

2nd word: relation to parallel lines