

Chapter 7 Review Guide

1. Theorems & Postulates Covered

- a. Same-Side Interior Angles Postulate
- b. Same-Side Exterior Angles Theorem
- c. Alternate Interior Angles Theorem
- d. Alternate Exterior Angles Theorem
- e. Corresponding Angles Theorem
- f. Converse of Corresponding Angles Theorem
- g. Converse of Alternate Interior Angles Theorem
- h. Converse of Same-Side Interior Angles Theorem
- i. Converse of the Alternate Exterior Angles Theorem
- j. two lines perpendicular to the same line
- k. Triangle Sum Theorem
- l. Triangle Exterior Angle Theorem

2. Angle Relationships

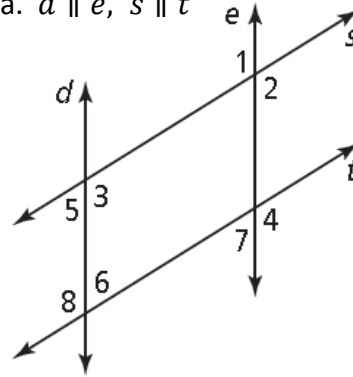
- a. Linear Pair
- b. Vertical Angles
- c. Adjacent Angles
- d. Supplementary Angles

Skills to Practice in Preparation for Test

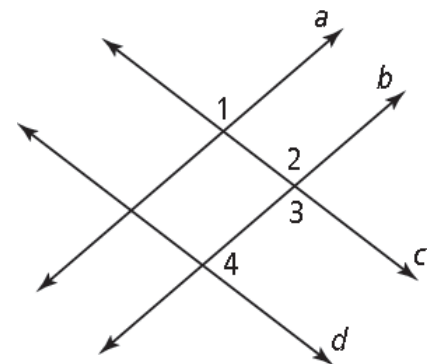
1. Be able to identify/Calculate Angle Relationships

Practice Identifying Angle Relationship in the figures below and calculating the value of each angle if $m\angle 1 = 35^\circ$. Give a reason for each.

- a. $d \parallel e$, $s \parallel t$

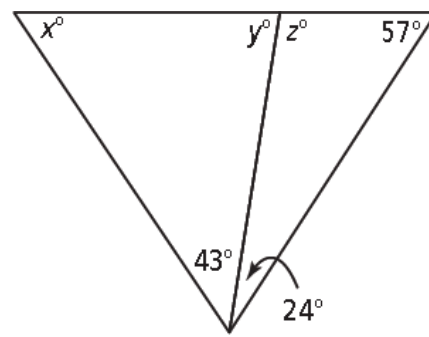


- b. $a \parallel b$, $c \parallel d$



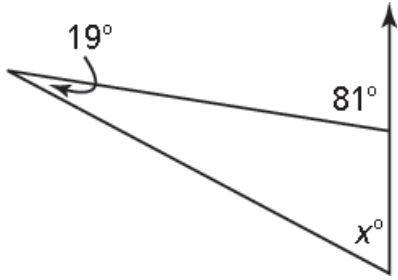
2. Be able to calculate missing angles in a figure.

- a. Practice calculating the missing angles in the figures below.

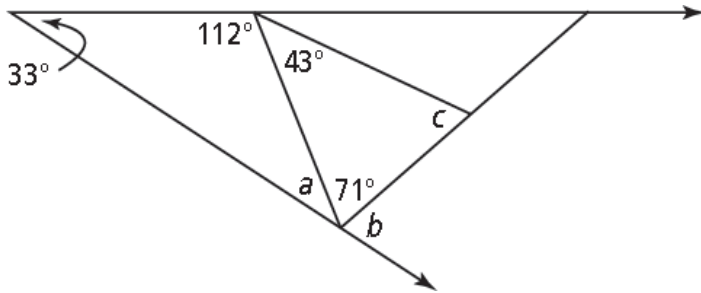


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b.

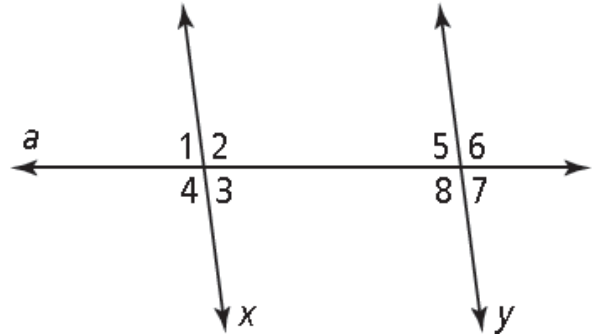


c. Find the values of angles $\angle a$, $\angle b$, and $\angle c$ below.



3. Be able to fill in missing parts of a Two Column Proof.

Complete the two-column proof.



Given: $x \parallel y$

Prove: $\angle 3 \cong \angle 5$

Statements	Reasons
1) $x \parallel y$	1)
2) $m\angle 3 + m\angle 8 = 180^\circ$	2)
3) $m\angle 5 + m\angle 8 = 180^\circ$	3)
4)	4) Transitive Property of Equality
5)	5) Subtraction Property of Equality
6)	6) Definition of congruence