

# Answer Key

## Chapter 8

### Lesson 8.4

### Practice B

1.  $\angle N \cong \angle X$ ,  $\angle T \cong \angle Y$ ,  $\angle M \cong \angle B$ ;  
 $\frac{MN}{BX} = \frac{NT}{XY} = \frac{MT}{BY}$  2.  $\angle BAD \cong \angle CAE$ ;  
 $\angle ABD \cong \angle ACE$ ;  $\angle ADB \cong \angle AEC$ ;  
 $\frac{AB}{AC} = \frac{BD}{CE} = \frac{AD}{AE}$  3.  $\angle G \cong \angle L$ ,  $\angle H \cong \angle LIK$ ,  
 $\angle GJH \cong \angle K$ ;  $\frac{GH}{LI} = \frac{HJ}{IK} = \frac{GJ}{LK}$  4.  $AGN$
5.  $AG, GN, NA$  6.  $16, x$  7.  $16, y$  8.  $15, 18$
9. yes;  $\triangle NMO \sim \triangle QRP$  10. not enough information to determine 11. yes;  $\triangle DFG \sim \triangle RST$
12. yes;  $\triangle ABE \sim \triangle DBC$
13. yes;  $\triangle XYW \sim \triangle ZYV$
14. yes;  $\triangle SRT \sim \triangle SQU$

15. *Sample answer:*

Statements	Reasons
1. $\overline{DE}$ is midsegment of $\triangle ABC$ .	1. Given
2. $\overline{DE} \parallel \overline{AC}$	2. Midsegment Thm.
3. $\angle CAB \cong \angle EDB$	3. Corresp. $\sphericalangle$ Post.
4. $\angle B \cong \angle B$	4. Reflexive Prop. of Congruence
5. $\triangle ABC \sim \triangle DBE$	5. AA $\sim$ Postulate