

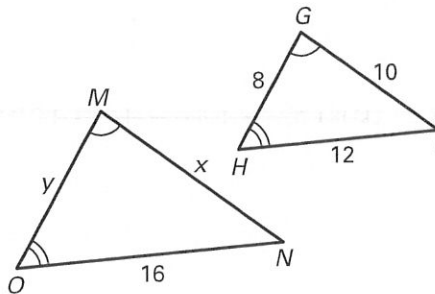
**LESSON 6.3**

**Practice A**

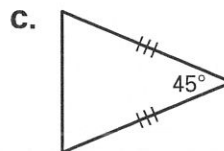
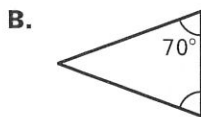
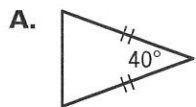
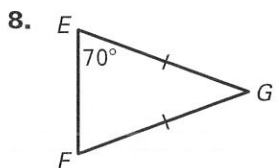
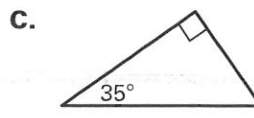
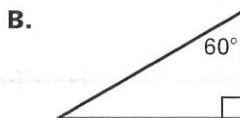
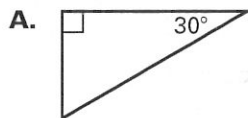
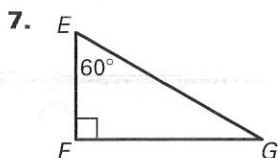
For use with the lesson "Prove Triangles Similar by AA"

Use the diagram to complete the statement.

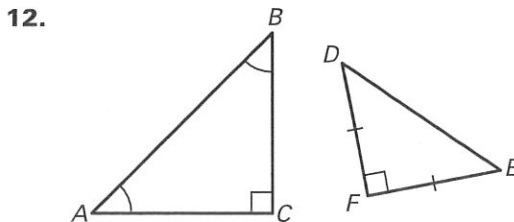
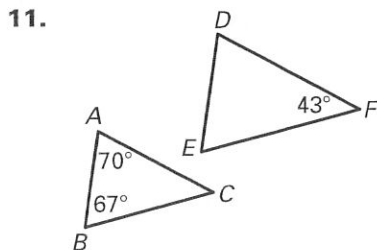
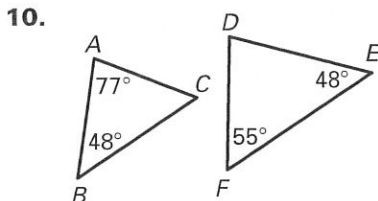
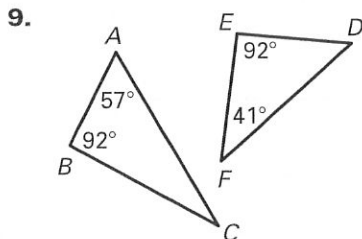
1.  $\triangle MON \sim \underline{\quad?}$
2.  $\frac{MN}{?} = \frac{ON}{?} = \frac{MO}{?}$
3.  $\frac{16}{12} = \frac{?}{10}$
4.  $\frac{12}{16} = \frac{?}{y}$
5.  $x = \underline{\quad?}$
6.  $y = \underline{\quad?}$



Which triangles are similar to  $\triangle EFG$ ? Explain.

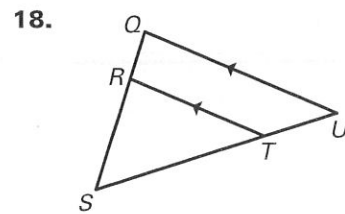
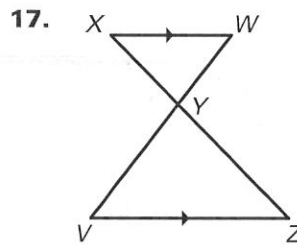
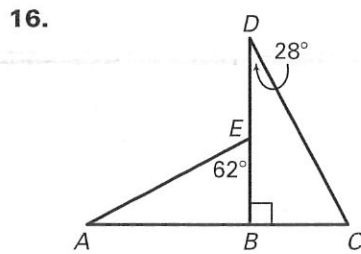
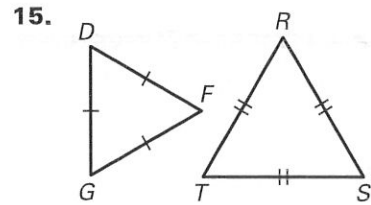
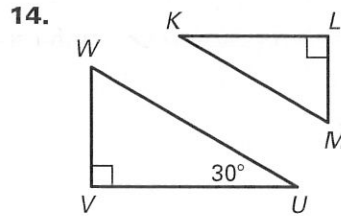
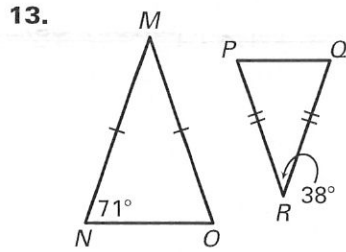


Determine whether  $\triangle ABC$  and  $\triangle DEF$  are similar, not similar, or cannot be determined from the information given in the figure.

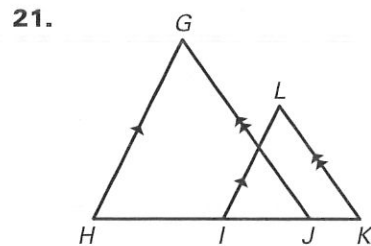
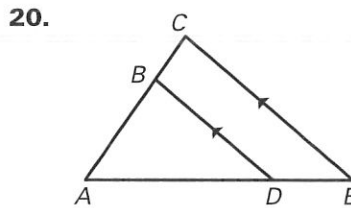
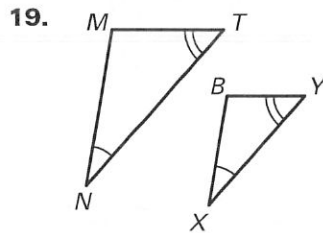


**LESSON 6.3** **Practice A** *continued*  
 For use with the lesson "Prove Triangles Similar by AA"

**Determine whether the triangles can be proved similar. If they are similar, write a similarity statement. Explain your reasoning.**



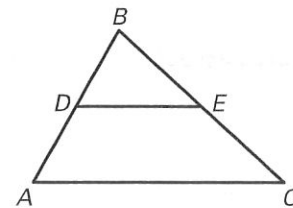
**Show that the triangles are similar.**



**22. Proof** Write a two-column or paragraph proof.

**GIVEN:**  $\overline{DE}$  is a midsegment of  $\triangle ABC$ .

**PROVE:**  $\triangle ABC \sim \triangle DBE$



**23. A-Frame** The A-frame building shown in the figure has a balcony that is 16 feet long, 16 feet high, and parallel to the ground. The building is 28 feet wide at its base. How tall is the A-frame building?

