Name _____ Date _____

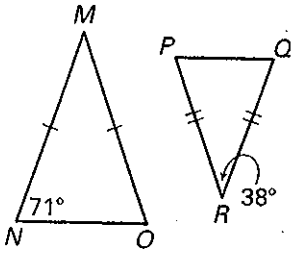
LESSON 6.4

Practice A *continued*

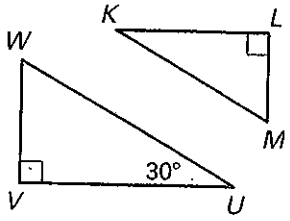
For use with pages 381–387

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

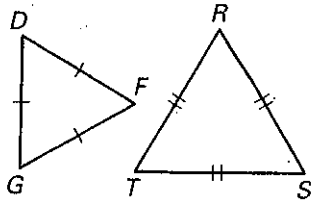
13.



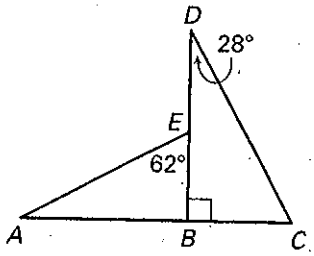
14.



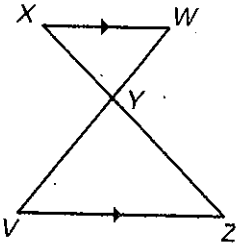
15.



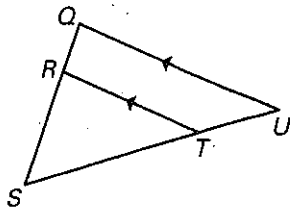
16.



17.

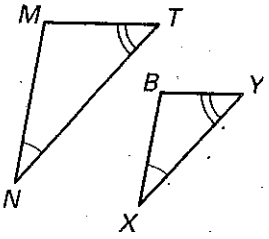


18.

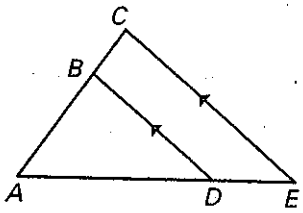


Show that the triangles are similar.

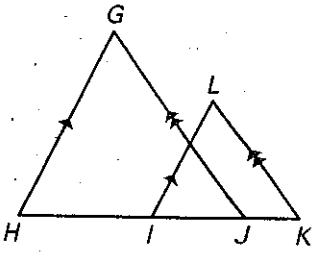
19.



20.



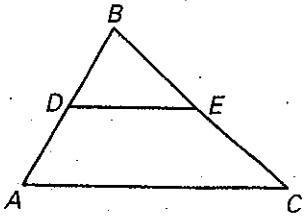
21.



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

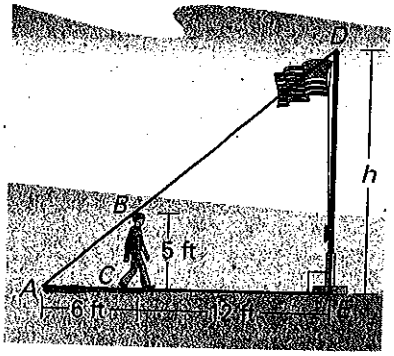
GIVEN: $\overline{DE}$ is a midsegment of $\triangle ABC$.

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



In Exercises 23–25, use the following information.

Flag Pole In order to estimate the height h of a flag pole, a 5 foot tall male student stands so that the tip of his shadow coincides with the tip of the flag pole's shadow. This scenario results in two similar triangles as shown in the diagram.



23. Why are the two overlapping triangles similar?

24. Using the similar triangles, write a proportion that models the situation.

25. What is the height h (in feet) of the flag pole?

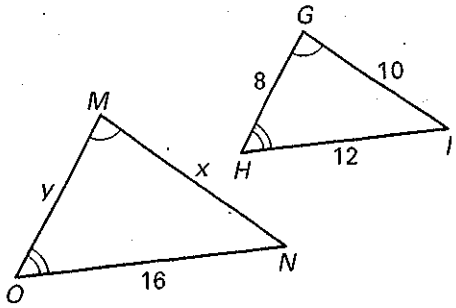
Name _____ Date _____

LESSON 6.4

Practice A

For use with pages 381–387

Use the diagram to complete the statement.



1. $\triangle MON \sim$?

2. $\frac{MN}{?} = \frac{ON}{?} = \frac{MO}{?}$

3. $\frac{16}{12} = \frac{?}{10}$

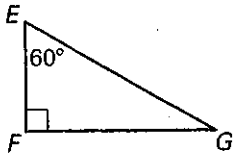
4. $\frac{12}{16} = \frac{?}{y}$

5. $x =$?

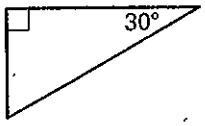
6. $y =$?

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

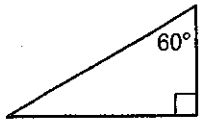
7.



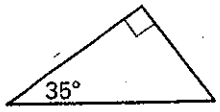
A.



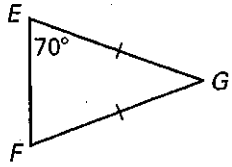
B.



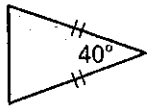
C.



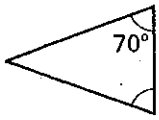
8.



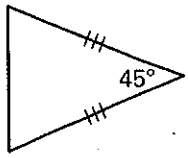
A.



B.

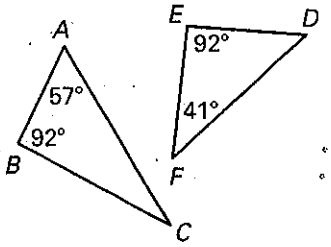


C.

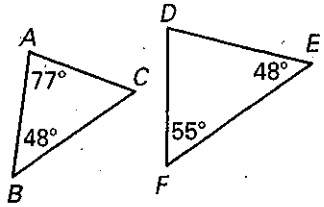


Determine whether $\triangle ABC$ and $\triangle DEF$ are *similar*, *not similar*, or *cannot be determined* from the information given in the figure.

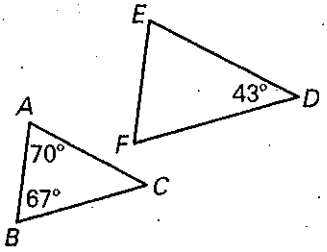
9.



10.



11.



12.