Practice 7-2

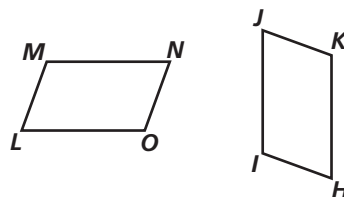**Similar Polygons**

Are the polygons similar? If they are, write a similarity statement, and give the similarity ratio. If they are not, explain.

1.

2.

3.

4.

5.

6.

LMNO ~ HIJK. **Complete the proportions and congruence statements.**

7. $\angle M \cong$?

8. $\angle K \cong$?

9. $\angle N \cong$?

10. $\dfrac{MN}{IJ} = \dfrac{?}{JK}$

11. $\dfrac{HK}{?} = \dfrac{HI}{LM}$

12. $\dfrac{IJ}{MN} = \dfrac{HK}{?}$

Algebra **The polygons are similar. Find the values of the variables.**

13.

14.

15.

16.

$\triangle WXZ \sim \triangle DFG.$ **Use the diagram to find the following.**

17. the similarity ratio of $\triangle WXZ$ and $\triangle DFG$

18. $m\angle Z$

19. DG

20. GF

21. $m\angle G$

22. $m\angle D$

23. WZ