Name:	
maine.	

## Geometry Chapter 8 Review

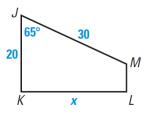
## In the diagram, JKLM ~ EFGH.

1. *x* =

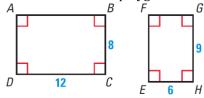
2. *y* = \_\_\_\_\_

3. z=

4. If the area of EFGH is 60.5, E find the area of JKLM. H 3 G



5. Decide whether the polygons are similar.



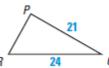
In the diagram,  $\Delta PQR \sim \Delta ABC$ .

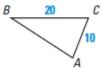
6. ∠*R* ≅ ∠\_\_\_\_

7. ∠*Q* ≅ ∠\_\_\_\_

8. *PR* = \_\_\_\_

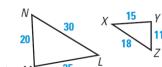
9. AB =\_\_\_\_\_



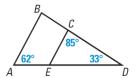


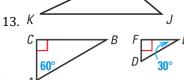
10. Find the perimeter of  $\triangle ABC$ .

Determine whether the triangles are similar. If so, write a similarity statement and the postulate or theorem that justifies your answer.

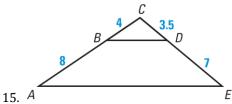


11. *M* 

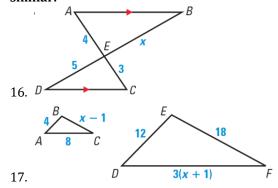




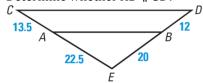
14.



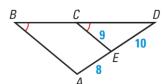
Find the value of x that makes the two triangles similar.



18. Determine whether  $\overline{AB} \parallel \overline{CD}$ .

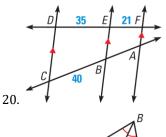


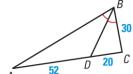
Find the length of  $\overline{AB}$ .



19.

21.





22. **SCALE MODEL** You are making a scale model of your school's baseball diamond as part of an art project. The distance between two consecutive bases is 90 feet. If you use a scale factor of  $\frac{1}{180}$  to build your model, what will be the distance around the bases on your model?



## Answers

- 1. 27.5
- 2. 12
- 3. 65
- 4. 378.125
- 5. Similar because the corresponding sides are proportional and the corresponding angles are  $\cong$
- 6. ∠*C*
- 7. ∠*B*
- 8. 12
- 9. 17.5
- 10. 47.5
- 11. Not similar
- 12. Similar;  $\Delta CDE \sim \Delta BDA$ ; AA Similarity Postulate
- 13. Similar;  $\Delta KJN \sim \Delta MLN$ ; SAS Similarity Postulate
- 14. Similar;  $\triangle ABC \sim \triangle DEF$ ; AA Similarity Postulate
- 15. Similar;  $\Delta BCD \sim \Delta ACE$ ; SAS Similarity Postulate
- 16.  $\frac{20}{3}$
- 17. 7
- 18. Parallel
- 19. 16.2
- 20. 24
- 21. 78
- 22. 2 ft (1/2 ft between consecutive bases)