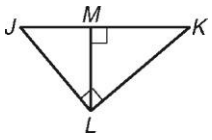
Name _____ Date _____ Class _____

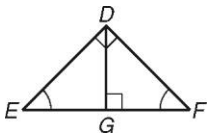
LESSON 17-4

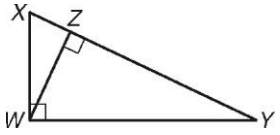
Similarity in Right Triangles

Practice and Problem Solving: A/B

Write a similarity statement comparing the three triangles in each diagram.

1. 

2. 

3. 

_____ _____ _____

_____ _____ _____

Find the geometric mean of each pair of numbers. If necessary, give the answer in simplest radical form.

4. $\frac{1}{4}$ and 4 _____

5. 3 and 75 _____

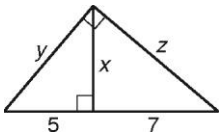
6. 4 and 18 _____

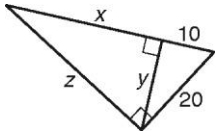
7. $\frac{1}{2}$ and 9 _____

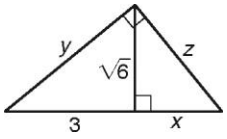
8. 10 and 14 _____

9. 4 and 12.25 _____

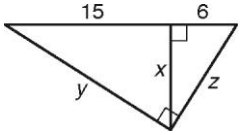
Find *x*, *y*, and *z*.

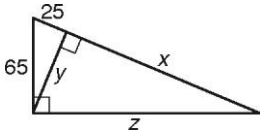
10. 

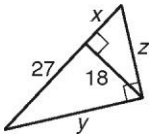
11. 

12. 

_____ _____ _____

13. 

14. 

15. 

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Name _____ Date _____ Class_____

LESSON 17-4

Practice and Problem Solving: A/B

1. Possible answers: $\angle JKL$ □ $\angle JLM$ □ $\angle LKM$
2. $\angle DEF$ □ $\angle GED$ □ $\angle GDF$
3. $\angle WXY$ □ $\angle ZXW$ □ $\angle ZWY$
4. 1
5. 15
6. $6\sqrt{2}$
7. $\frac{3\sqrt{2}}{2}$
8. $2\sqrt{35}$
9. 7
10. $\sqrt{35}$; $2\sqrt{15}$; $2\sqrt{21}$
11. 30; $10\sqrt{3}$; $20\sqrt{3}$
12. 2; $\sqrt{15}$; $\sqrt{10}$
13. $3\sqrt{10}$; $3\sqrt{35}$; $3\sqrt{14}$
14. 144; 60; 156
15. 12; $9\sqrt{13}$; $6\sqrt{13}$

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