Lesson 8.4 Practice: Proving Triangles Similar: SSS and SAS

School Launch · Geometry · Unit 8: Similarity · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Are triangles with sides $4, 8, 9$ and $6, 12, \frac{29}{2}$ similar? If so, give the scale factor. EASY

2. Are triangles with sides $4, 6, 13$ and $8, 12, 27$ similar? If so, give the scale factor. EASY

3. Are triangles with sides $6, 8, 13$ and $9, 12, \frac{39}{2}$ similar? If so, give the scale factor. EASY

4. Are triangles with sides $3, 6, 9$ and $\frac{9}{2}, 9, \frac{27}{2}$ similar? If so, give the scale factor. MEDIUM

5. Are triangles with sides $4, 10, 11$ and $6, 15, \frac{33}{2}$ similar? If so, give the scale factor. MEDIUM

6. Are triangles with sides $4, 6, 13$ and $10, 15, \frac{67}{2}$ similar? If so, give the scale factor. MEDIUM

7. Are triangles with sides $9, 10, 11$ and $18, 20, 22$ similar? If so, give the scale factor. MEDIUM

8. Are triangles with sides $4, 5, 11$ and $6, \frac{15}{2}, \frac{33}{2}$ similar? If so, give the scale factor. HARD

9. Are triangles with sides $4, 7, 8$ and $8, 14, 16$ similar? If so, give the scale factor. HARD

10. Are triangles with sides $4, 5, 11$ and $10, \frac{25}{2}, \frac{55}{2}$ similar? If so, give the scale factor. HARD