Name: _____ Date: _____

Fresh Math

Congruence And Similarity - Medium

Are the two figures congruent, similar, or neither? If similar, give the scale factor from the first figure to the second.

1. Triangle 1 sides: 8, 14, 16. Triangle 2 sides: 12, 21, 24.
2. Triangle 1 sides: 6, 6, 9. Triangle 2 sides: 6, 6, 9.
3. Rectangle 1 dimensions: 10, 14. Rectangle 2 dimensions: 15, 21.
4. Rectangle 1 dimensions: 3, 5. Rectangle 2 dimensions: 9, 15.
5. Rectangle 1 dimensions: 6, 9. Rectangle 2 dimensions: 6, 9.
6. Rectangle 1 dimensions: 14, 18. Rectangle 2 dimensions: 21, 27.
7. Triangle 1 sides: 4, 18, 18. Triangle 2 sides: 6, 27, 27.
8. Rectangle 1 dimensions: 12, 16. Rectangle 2 dimensions: 30, 40.
9. Rectangle 1 dimensions: 4, 8. Rectangle 2 dimensions: 12, 24.
10. Triangle 1 sides: 6, 12, 14. Triangle 2 sides: 9, 18, 21.

Name: _____ Date: _____

Fresh Math

Congruence And Similarity - Medium

Are the two figures congruent, similar, or neither? If similar, give the scale factor from the first figure to the second.

11. Triangle 1 sides: 3, 4, 6. Triangle 2 sides: 9, 12, 19.

12. Rectangle 1 dimensions: 8, 9. Rectangle 2 dimensions: 8, 9.

13. Rectangle 1 dimensions: 5, 5. Rectangle 2 dimensions: 10, 10.

14. Triangle 1 sides: 7, 7, 9. Triangle 2 sides: 14, 14, 18.

15. Rectangle 1 dimensions: 2, 6. Rectangle 2 dimensions: 2, 6.

16. Triangle 1 sides: 12, 14, 16. Triangle 2 sides: 18, 21, 24.

17. Triangle 1 sides: 4, 5, 7. Triangle 2 sides: 12, 15, 21.

18. Triangle 1 sides: 4, 8, 9. Triangle 2 sides: 12, 24, 27.

19. Rectangle 1 dimensions: 6, 6. Rectangle 2 dimensions: 3, 3.

20. Triangle 1 sides: 8, 8, 9. Triangle 2 sides: 16, 16, 18.

Congruence And Similarity - Medium - Answer Key

1. Triangle 1 sides: 8, 14, 16. Triangle 2 sides: 12, 21, 24.
   similar, scale factor 3/2

2. Triangle 1 sides: 6, 6, 9. Triangle 2 sides: 6, 6, 9.
   congruent (all sides equal)

3. Rectangle 1 dimensions: 10, 14.
   Rectangle 2 dimensions: 15, 21.
   similar, scale factor 3/2

4. Rectangle 1 dimensions: 3, 5.
   Rectangle 2 dimensions: 9, 15.
   similar, scale factor 3

5. Rectangle 1 dimensions: 6, 9.
   Rectangle 2 dimensions: 6, 9.
   congruent (all sides equal)

6. Rectangle 1 dimensions: 14, 18.
   Rectangle 2 dimensions: 21, 27.
   similar, scale factor 3/2

7. Triangle 1 sides: 4, 18, 18. Triangle 2 sides: 6, 27, 27.
   similar, scale factor 3/2

8. Rectangle 1 dimensions: 12, 16.
   Rectangle 2 dimensions: 30, 40.
   similar, scale factor 5/2

9. Rectangle 1 dimensions: 4, 8.
   Rectangle 2 dimensions: 12, 24.
   similar, scale factor 3

10. Triangle 1 sides: 6, 12, 14. Triangle 2 sides: 9, 18, 21.
    similar, scale factor 3/2

Congruence And Similarity - Medium - Answer Key

11. Triangle 1 sides: 3, 4, 6. Triangle 2 sides: 9, 12, 19.
    neither (the side ratios are not all equal)

12. Rectangle 1 dimensions: 8, 9.
    Rectangle 2 dimensions: 8, 9.
    congruent (all sides equal)

13. Rectangle 1 dimensions: 5, 5.
    Rectangle 2 dimensions: 10, 10.
    similar, scale factor 2

14. Triangle 1 sides: 7, 7, 9. Triangle 2 sides: 14, 14, 18.
    similar, scale factor 2

15. Rectangle 1 dimensions: 2, 6.
    Rectangle 2 dimensions: 2, 6.
    congruent (all sides equal)

16. Triangle 1 sides: 12, 14, 16. Triangle 2 sides: 18, 21, 24.
    similar, scale factor 3/2

17. Triangle 1 sides: 4, 5, 7. Triangle 2 sides: 12, 15, 21.
    similar, scale factor 3

18. Triangle 1 sides: 4, 8, 9. Triangle 2 sides: 12, 24, 27.
    similar, scale factor 3

19. Rectangle 1 dimensions: 6, 6.
    Rectangle 2 dimensions: 3, 3.
    similar, scale factor 1/2

20. Triangle 1 sides: 8, 8, 9. Triangle 2 sides: 16, 16, 18.
    similar, scale factor 2