

Similar Triangles Printable Worksheet

1. Two similar triangles have corresponding side lengths 3 and 9. What is the scale factor from the smaller triangle to the larger triangle?
2. A triangle has side lengths 4, 6, and 8. A similar triangle is enlarged by a scale factor of 2. What are the new side lengths?
3. A larger triangle has a side of length 20. The scale factor from the smaller triangle to the larger triangle is 4. What is the corresponding smaller side length?
4. Two similar triangles have corresponding sides 3 and 6, and 5 and x . Find x .
5. Two similar triangles have corresponding sides 4 and 10, and 6 and x . Find x .
6. Two similar triangles have corresponding sides 8 and 12, and 10 and x . Find x .
7. Two triangles have two pairs of corresponding angles congruent. What similarity rule proves the triangles are similar?
8. Are triangles with side lengths 3,4,5 and 6,8,10 similar? Explain why.

Answer Key

1. Scale factor = 3
2. New side lengths: 8, 12, 16
3. Smaller side length = 5
4. $x = 10$
5. $x = 15$
6. $x = 15$
7. AA Similarity
8. Yes. All corresponding side lengths have the same scale factor of 2.