



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Use a scale factor to find missing sides. ✓ Understand that corresponding sides are in proportion.
 ✓ Understand that corresponding angles are equal. ✓ Apply the AA similarity criterion.

Section A • Concept Check • BEGINNER $4 \times 1 = 4$ _____

- 1** $\triangle ABC$ has sides 4, 5, 6; a similar triangle has scale factor 2.5. Its sides are:
☐ A. 10, 12.5, 15 ☐ B. 6.5, 7.5, 8.5 ☐ C. 8, 10, 12 ☐ D. 1.6, 2, 2.4
- 2** Two similar triangles have corresponding sides 8 and 20. The scale factor is:
☐ A. 2.5 ☐ B. 12 ☐ C. 0.4 ☐ D. 28
- 3** Similar rectangles: $6 \rightarrow 18$ (factor 3); the smaller's other side is 4, so the larger's is:
☐ A. 12 ☐ B. 7 ☐ C. 24 ☐ D. 1.33
- 4** In similar figures, corresponding angles are:
☐ A. proportional ☐ B. equal
☐ C. supplementary ☐ D. doubled

Section B • Problem Solving • INTERMEDIATE $2 + 3 \times 3 = 11$ _____

- 5** Similar figures have the same _____ but possibly different size.
- 6** Corresponding sides of similar figures are in _____.
- 7** Triangle ABC has sides 4, 5, 6. A similar triangle has scale factor 2.5. Find its sides.

- 8** Two similar triangles have corresponding sides 8 and 20. Find the scale factor.

- 9** Similar rectangles have sides 6 and 18; the smaller's other side is 4. Find the larger's.

Section C • Challenge • CHALLENGE 5 _____

- 10** What must be true about corresponding angles in similar figures?

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-B | 5 shape 6 proportion 7 = 10, 12.5, 15 8 = 2.5 9 = 12 (scale factor 3)
 | 10 = They must be equal