NEBRASKA GEOMETRY · UNIT 1

Congruence and Similarity — Practice Test

Nebraska Geometry • 10 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Two similar triangles have corresponding sides 8 and 20. Another side of the smaller triangle is 12. The corresponding side of the larger triangle is ____**

ANSWER _____

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2 **The point (-5, 2) reflected across the y -axis maps to**

A (-5, -2)

B (5, -2)

C (2, -5)

D (5, 2)

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3 **The point (3, -2) rotated 180° about the origin maps to**

- A (-3, 2)
- B (3, 2)
- C (-2, 3)
- D (2, -3)

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4 **A triangle has two sides of lengths 4 and 9. Which length could be the third side?**

- A 4
- B 5
- C 10
- D 13

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5 An isosceles triangle has base angles measuring 70° each. The vertex angle measures

- A 70°
- B 40°
- C 110°
- D 20°

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6 Two similar figures have a linear scale factor of 2:3. The larger figure has area 45. The smaller area is

- A 30
- B 67.5
- C 20
- D 10

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7 **A side of length 6 maps to a side of length 18 under a dilation. The scale factor is _____**

ANSWER _____

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8 **Triangle ABC is congruent to triangle XYZ, with AB corresponding to XY. If AB = 8, then XY equals**

A 16

B 4

C 8

D 12

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9 The remote interior angles of a triangle measure 65° and 45°. The exterior angle at the third vertex measures

- A 20°
- B 110°
- C 65°
- D 155°

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10 A figure has area 18. Under a dilation with scale factor 2, the area of the image is ____

ANSWER _____

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ANSWER KEY

1.	30	**5.**	B	**9.**	B
2.	D	**6.**	C	**10.**	72
3.	A	**7.**	3		
4.	C	**8.**	C		

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