ILLINOIS GEOMETRY · UNIT 1 · 10 QUESTIONS

Congruence and Similarity — Practice Test

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

Understand It with Pulse | Flag a mistake

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



A (-5, -2)

B (5, -2)

C (2, -5)

D (5, 2)

Understand It with Pulse | Flag a mistake

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

A (-3, 2)

B (3, 2)

C (-2, 3)

D (2, -3)

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

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

A 70°

B 40°

C 110°

D 20°

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

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°

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.