ILLINOIS GEOMETRY · UNIT 1 · 5 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 **A roof truss is built from triangles. Two triangles have two pairs of corresponding angles equal, and a pair of nonincluded sides equal. The congruence criterion is**



A SSS

B AAS

C ASA

D HL

Understand It with Pulse | Flag a mistake

2 **One triangle has angles 40° and 70°. Another triangle has angles 40° and 70°. The triangles are similar by**

- A SSS
- B SAS
- C AA
- D HL

Understand It with Pulse | Flag a mistake

3 **Under a dilation centered at the origin with scale factor 0.5, the point (8, 6) maps to**

- A (16, 12)
- B (4, 3)
- C (8, 3)
- D (4, 6)

Understand It with Pulse | Flag a mistake

4 In a triangle, a midsegment is parallel to a base of length 22. The length of the midsegment is

- A 22
- B 44
- C 11
- D 5.5

Understand It with Pulse | Flag a mistake

5 Two similar triangles have a linear scale factor of 3:4. The smaller triangle has perimeter 27. The larger perimeter is

- A 20.25
- B 48
- C 36
- D 81

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. C
3. B
4. C
5. C

© 2026 Brett Robbins. All Rights Reserved.