CALIFORNIA GEOMETRY · UNIT 1 · 25 QUESTIONS

Congruence and Transformations — 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 triangles have three pairs of corresponding sides equal. The criterion is**

- A AAS
- B ASA
- C SSS
- D SAS

Understand It with Pulse | Flag a mistake

2 **Two triangles have two pairs of corresponding sides equal and the included angle equal. The criterion is**

A SSA

B ASA

C SAS

D SSS

Understand It with Pulse | Flag a mistake

3 **Two triangles have two pairs of corresponding angles equal and the included side equal. The criterion is**

A HL

B ASA

C AAS

D SSS

Understand It with Pulse | Flag a mistake

4 **Two right triangles have equal hypotenuses and one pair of equal legs. The criterion is**

A SAS

B HL

C ASA

D SSS

Understand It with Pulse | Flag a mistake

5 **Triangle ABC is congruent to triangle DEF. Angle A measures 38° and angle B measures 95°. Angle F measures**

A 47°

B 95°

C 133°

D 38°

Understand It with Pulse | Flag a mistake

6 **Under a translation (x + 4, y - 3), the point (-2, 9) maps to**

- A (-6, 6)
- B (2, 12)
- C (-6, 12)
- D (2, 6)

Understand It with Pulse | Flag a mistake

7 **The point (5, -3) reflected across the y -axis maps to**

- A (-5, 3)
- B (5, 3)
- C (-5, -3)
- D (5, -3)

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8 **The point (2, 7) reflected across the x -axis maps to**

- A (2, -7)
- B (-2, 7)
- C (-2, -7)
- D (2, 7)

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9 **The point (4, 2) rotated 90° counterclockwise about the origin maps to**

- A (2, 4)
- B (-2, 4)
- C (2, -4)
- D (-4, -2)

Understand It with Pulse | Flag a mistake

10 **The point (3, -6) rotated 180° about the origin maps to**

- A (-3, -6)
- B (6, -3)
- C (-3, 6)
- D (3, 6)

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11 **The point (-1, 5) rotated 90° clockwise about the origin maps to**

- A (5, 1)
- B (5, -1)
- C (-5, -1)
- D (-5, 1)

Understand It with Pulse | Flag a mistake

12 **Under a dilation centered at the origin with scale factor 3, the point (-2, 5) maps to**

A (-2, 15)

B (-6, 15)

C (-6, 5)

D (6, -15)

Understand It with Pulse | Flag a mistake

13 **A reflection across the line y = x maps (4, 9) to**

A (9, 4)

B (4, -9)

C (-9, 4)

D (-4, -9)

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14 **Which transformation is NOT a rigid motion?**

- A Translation
- B Dilation with scale factor 2
- C Rotation
- D Reflection

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15 **An isosceles triangle has a vertex angle of 84°. Each base angle measures**

- A 96°
- B 84°
- C 48°
- D 42°

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16 An exterior angle of a triangle measures 142°. One remote interior angle measures 88°. The other remote interior angle measures

- A 142°
- B 38°
- C 54°
- D 88°

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17 A triangle has two sides of lengths 6 and 14. The greatest possible whole number length of the third side is

- A 21
- B 8
- C 20
- D 19

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18 **A triangle has two sides of lengths 5 and 11. Which length could be the third side?**

- A 16
- B 8
- C 6
- D 17

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19 **A triangle has angles measuring 47° and 83°. The third angle measures**

- A 83°
- B 50°
- C 130°
- D 47°

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20 **Two parallel lines are cut by a transversal. One acute angle is 63°. An obtuse angle formed measures**

- A 63°
- B 153°
- C 27°
- D 117°

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21 **The perpendicular bisector of a segment is the set of points**

- A On the segment only
- B At the midpoint only
- C Parallel to the segment
- D Equidistant from the segment endpoints

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22 **If two figures are congruent then they have**

- A Equal size and shape
- B Different angles
- C Equal size only
- D Equal shape only

Understand It with Pulse | Flag a mistake

23 **A rotation of 360° about a point maps a figure to**

- A Itself
- B A smaller figure
- C A larger figure
- D Its mirror image

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24 **Triangle ABC is congruent to triangle XYZ. Side AB has length 9. The corresponding side is**

A YZ

B XY

C XZ

D BC

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25 **Under the translation (x - 6, y + 2), the image of (10, -4) has x - coordinate ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. C
3. B
4. B
5. A
6. D
7. B
8. A
9. B
10. C
11. A
12. B
13. A
14. B
15. C
16. C
17. D
18. B
19. B
20. D
21. D
22. A
23. A
24. B
25. 4

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