CONNECTICUT GEOMETRY · UNIT 1 · 25 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 **Triangle ABC is congruent to triangle DEF. Angle A measures 40 degrees and angle B measures 70 degrees. Angle C measures**

- A 70°
- B 80°
- C 60°
- D 110°

Understand It with Pulse | Flag a mistake

2 **Triangle ABC is congruent to triangle DEF. Angle A measures 35 degrees and angle B measures 75 degrees. Angle C measures**

- A 80°
- B 70°
- C 60°
- D 110°

Understand It with Pulse | Flag a mistake

3 **Triangle ABC is congruent to triangle DEF. Angle A measures 55 degrees and angle B measures 65 degrees. Angle C measures**

- A 70°
- B 50°
- C 60°
- D 120°

Understand It with Pulse | Flag a mistake

4 **Triangle ABC is congruent to triangle DEF. Angle A measures 80 degrees and angle B measures 50 degrees. Angle C measures**

- A 60°
- B 40°
- C 130°
- D 50°

Understand It with Pulse | Flag a mistake

5 **Triangle ABC is congruent to triangle DEF. Angle A measures 30 degrees and angle B measures 110 degrees. Angle C measures**

- A 40°
- B 50°
- C 30°
- D 140°

Understand It with Pulse | Flag a mistake

6 **A side of length 4 in one figure maps to a side of length 12 under a dilation. The scale factor is**

- A 4
- B 3
- C 12
- D 1

Understand It with Pulse | Flag a mistake

7 **A side of length 5 in one figure maps to a side of length 15 under a dilation. The scale factor is**

- A 4
- B 15
- C 3
- D 1

Understand It with Pulse | Flag a mistake

8 **A side of length 3 in one figure maps to a side of length 12 under a dilation. The scale factor is**

- A 5
- B 12
- C 1
- D 4

Understand It with Pulse | Flag a mistake

9 **A side of length 6 in one figure maps to a side of length 18 under a dilation. The scale factor is**

- A 3
- B 4
- C 18
- D 1

Understand It with Pulse | Flag a mistake

10 **A side of length 2 in one figure maps to a side of length 10 under a dilation. The scale factor is**

- A 6
- B 5
- C 10
- D 1

Understand It with Pulse | Flag a mistake

11 **Two similar triangles have a linear scale factor of 1 to 3. The smaller triangle has perimeter 20. The larger perimeter is**

- A 20
- B 70
- C 60
- D 18

Understand It with Pulse | Flag a mistake

12 **Two similar triangles have a linear scale factor of 1 to 2. The smaller triangle has perimeter 16. The larger perimeter is**

- A 16
- B 42
- C 8
- D 32

Understand It with Pulse | Flag a mistake

13 **Two similar triangles have a linear scale factor of 1 to 4. The smaller triangle has perimeter 12. The larger perimeter is**

- A 48
- B 12
- C 58
- D 3

Understand It with Pulse | Flag a mistake

14 **Two similar triangles have a linear scale factor of 1 to 2. The smaller triangle has perimeter 30. The larger perimeter is**

- A 30
- B 60
- C 70
- D 15

Understand It with Pulse | Flag a mistake

15 **Two similar triangles have a linear scale factor of 1 to 3. The smaller triangle has perimeter 18. The larger perimeter is**

- A 18
- B 64
- C 54
- D 6

Understand It with Pulse | Flag a mistake

16 **Two similar figures have a linear scale factor of 1 to 4. The smaller figure has area 5. The larger area is**

- A 20
- B 9
- C 85
- D 80

Understand It with Pulse | Flag a mistake

17 **Two similar figures have a linear scale factor of 1 to 3. The smaller figure has area 9. The larger area is**

- A 81
- B 27
- C 12
- D 86

Understand It with Pulse | Flag a mistake

18 **Two similar figures have a linear scale factor of 1 to 5. The smaller figure has area 4. The larger area is**

A 20

B 100

C 9

D 105

Understand It with Pulse | Flag a mistake

19 **Two similar figures have a linear scale factor of 1 to 2. The smaller figure has area 16. The larger area is**

A 32

B 18

C 64

D 69

Understand It with Pulse | Flag a mistake

20 **Two similar figures have a linear scale factor of 1 to 2. The smaller figure has area 25. The larger area is**

- A 50
- B 27
- C 105
- D 100

Understand It with Pulse | Flag a mistake

21 **In a triangle, a midsegment is parallel to a base of length 14. The length of the midsegment is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **In a triangle, a midsegment is parallel to a base of length 20. The length of the midsegment is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 In a triangle, a midsegment is parallel to a base of length 12. The length of the midsegment is

ANSWER _____

Understand It with Pulse | Flag a mistake

24 In a triangle, a midsegment is parallel to a base of length 18. The length of the midsegment is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 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

ANSWER KEY

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

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