RIGHT TRIANGLES AND TRIGONOMETRY - PRACTICE TEST | NEW BRUNSWICK FINANCIAL AND WORKPLACE MATHEMATICS 110 · UNIT A · 25 QUESTIONS

Right Triangles and Trigonometry — 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 right triangle has adjacent side 8 and hypotenuse 10. Its cosine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A right triangle has hypotenuse 10 and one leg 6. The other leg is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A right triangle has legs 6 and 8. Its hypotenuse is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A right triangle has opposite side 3 and adjacent side 4. Its tangent ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A right triangle has opposite side 3 and hypotenuse 5. Its sine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A flagpole casts a shadow 10 metres long when the sun angle is 45 degrees. The flagpole height, in metres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A ladder leans at an angle of elevation of 45 degrees. The horizontal distance from the wall is 6 metres. The height reached, in metres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A ramp rises 4 metres over a horizontal run of 4 metres. The angle of elevation, in degrees, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A triangle with sides 3, 4, and 5 is a**

A equilateral triangle

B right triangle

C isosceles triangle only

D scalene triangle only

Understand It with Pulse | Flag a mistake

10 **An angle of elevation is measured from the**

A vertical downward

B hypotenuse

C horizontal upward

D opposite side

Understand It with Pulse | Flag a mistake

11 **If the tangent of an angle is 1, the angle is**

A 30 degrees

B 60 degrees

C 90 degrees

D 45 degrees

Understand It with Pulse | Flag a mistake

12 **In a right triangle, the cosine of an angle is the ratio of the**

A adjacent side to the hypotenuse

B opposite side to the hypotenuse

C hypotenuse to the adjacent side

D opposite side to the adjacent side

Understand It with Pulse | Flag a mistake

13 **In a right triangle, the longest side is called the**

A hypotenuse

B opposite side

C adjacent side

D base angle

Understand It with Pulse | Flag a mistake

14 **In a right triangle, the sine of an angle is the ratio of the**

A adjacent side to the hypotenuse

B opposite side to the adjacent side

C hypotenuse to the opposite side

D opposite side to the hypotenuse

Understand It with Pulse | Flag a mistake

15 **The angle of depression is measured from the**

A vertical upward

B hypotenuse

C horizontal downward

D adjacent side

Understand It with Pulse | Flag a mistake

16 **A right triangle has adjacent side 21 and hypotenuse 29. Its cosine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **A right triangle has hypotenuse 13 and one leg 12. The other leg is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A right triangle has legs 9 and 12. Its hypotenuse is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A right triangle has opposite side 5 and adjacent side 12. Its tangent ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A right triangle has opposite side 5 and hypotenuse 13. Its sine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A right triangle has adjacent side 20 and hypotenuse 25. Its cosine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A right triangle has hypotenuse 25 and one leg 24. The other leg is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A right triangle has legs 5 and 12. Its hypotenuse is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A right triangle has opposite side 8 and adjacent side 15. Its tangent ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A right triangle has opposite side 8 and hypotenuse 17. Its sine ratio, rounded to two decimal places, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 0.8
2. 8
3. 10
4. 0.75
5. 0.6
6. 10
7. 6
8. 45
9. B
10. C
11. D
12. A
13. A
14. D
15. C
16. 0.72
17. 5
18. 15
19. 0.42
20. 0.38
21. 0.8
22. 7
23. 13
24. 0.53
25. 0.47

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