BRITISH COLUMBIA WORKPLACE MATHEMATICS 10 (MWPM-10) · UNIT C · 25 QUESTIONS

Trigonometry and Polygons — 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 legs 3 cm and 4 cm. The hypotenuse, in centimetres, is**

- A 25
- B 7
- C 6
- D 5

Understand It with Pulse | Flag a mistake

2 **A right triangle has hypotenuse 13 cm and one leg 5 cm. The other leg, in centimetres, is**

- A 8
- B 18
- C 12
- D 14

Understand It with Pulse | Flag a mistake

3 **A right triangle has legs 6 cm and 8 cm. The hypotenuse, in centimetres, is ____.**

ANSWER _____

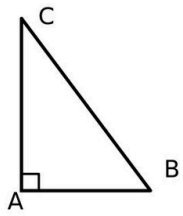
Understand It with Pulse | Flag a mistake

4 **A right triangle has hypotenuse 25 cm and one leg 7 cm. The other leg, in centimetres, is**

- **A** 18
- **B** 20
- **C** 32
- **D** 24

Understand It with Pulse | Flag a mistake

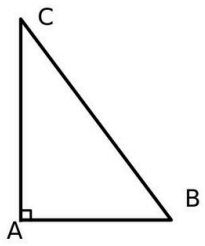
5 **The diagram shows a right triangle with legs 3 cm and 4 cm. The hypotenuse, in centimetres, is**



- **A** 12
- **B** 7
- **C** 6
- **D** 5

Understand It with Pulse | Flag a mistake

6 **The diagram shows a right triangle with legs 6 cm and 8 cm. The hypotenuse, in centimetres, is**



- **A** 10
- **B** 14
- **C** 12
- **D** 20

Understand It with Pulse | Flag a mistake

7 **In a right triangle, the side opposite an angle is 3 cm and the hypotenuse is 5 cm. The sine of the angle is**

- **A** 0.6
- **B** 0.8
- **C** 0.75
- **D** 1.67

Understand It with Pulse | Flag a mistake

8 **In a right triangle, the side adjacent to an angle is 4 cm and the hypotenuse is 5 cm. The cosine of the angle is**

- A 0.75
- B 1.25
- C 0.6
- D 0.8

Understand It with Pulse | Flag a mistake

9 **In a right triangle, the side opposite an angle is 3 cm and the side adjacent to it is 4 cm. The tangent of the angle is**

- A 0.6
- B 0.8
- C 0.75
- D 1.33

Understand It with Pulse | Flag a mistake

10 The acute angle with sine equal to 0.5 , in degrees, is

- A 30
- B 45
- C 60
- D 90

Understand It with Pulse | Flag a mistake

11 The acute angle with cosine equal to 0.5 , in degrees, is

- A 30
- B 45
- C 60
- D 90

Understand It with Pulse | Flag a mistake

12 **The acute angle with tangent equal to 1 , in degrees, is**

A 30

B 60

C 45

D 90

Understand It with Pulse | Flag a mistake

13 **In a right triangle, an angle is 30 degrees and the hypotenuse is 10 cm. The side opposite the angle, in centimetres, is**

A 5

B 8.66

C 20

D 15

Understand It with Pulse | Flag a mistake

14 **In a right triangle, an angle is 60 degrees and the hypotenuse is 12 cm. The side adjacent to the angle, in centimetres, is**

A 10.39

B 6

C 24

D 3

Understand It with Pulse | Flag a mistake

15 **In a right triangle, an angle is 45 degrees and the side adjacent to it is 7 cm. The side opposite the angle, in centimetres, is ____.**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **Two angles of a triangle are 50 degrees and 70 degrees. The third angle, in degrees, is**

A 50

B 60

C 70

D 120

Understand It with Pulse | Flag a mistake

17 **The sum of the interior angles of a pentagon, in degrees, is**

A 540

B 360

C 720

D 900

Understand It with Pulse | Flag a mistake

18 The sum of the interior angles of a hexagon, in degrees, is

- A 540
- B 720
- C 900
- D 1080

Understand It with Pulse | Flag a mistake

19 Each interior angle of a regular hexagon, in degrees, is

- A 108
- B 120
- C 135
- D 90

Understand It with Pulse | Flag a mistake

20 **Each interior angle of a regular octagon, in degrees, is**

- A 120
- B 108
- C 135
- D 150

Understand It with Pulse | Flag a mistake

21 **Each exterior angle of a regular pentagon, in degrees, is**

- A 72
- B 108
- C 60
- D 90

Understand It with Pulse | Flag a mistake

22 **The interior angles of a polygon add to 900 degrees. The number of sides of the polygon is**

- A 5
- B 6
- C 7
- D 8

Understand It with Pulse | Flag a mistake

23 **One angle is 35 degrees. Its complementary angle, in degrees, is**

- A 145
- B 55
- C 65
- D 35

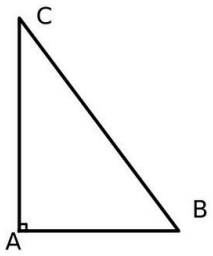
Understand It with Pulse | Flag a mistake

24 **One angle is 110 degrees. Its supplementary angle, in degrees, is _____.**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The diagram shows a right triangle with legs 9 cm and 12 cm. The hypotenuse, in centimetres, is**



A 15

B 21

C 10

D 18

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. D
2. C
3. 10
4. D
5. D
6. A
7. A
8. D
9. C
10. A
11. C
12. C
13. A
14. B
15. 7
16. B
17. A
18. B
19. B
20. C
21. A
22. C
23. B
24. 70
25. A

© 2026 Brett Robbins. All Rights Reserved.