NEWFOUNDLAND AND LABRADOR MATHEMATICS 3200 · UNIT C · 25 QUESTIONS

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 circle has radius 5 units. An arc subtending a central angle of 2 radians has length**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The amplitude of $y = 3 \sin(2x - 1) + 4$ is**



A 3

B 2

C 4

D 1

Understand It with Pulse | Flag a mistake

3 **The angle 120° in radians is**



A 2π/3

B π/3

C 3π/2

D 2π

Understand It with Pulse | Flag a mistake

4 **A sector of a circle of radius 6 units has central angle 2 radians. Its area is**

ANSWER

Understand It with Pulse | Flag a mistake

5 **If $\sin\theta = 0.6$ and $\cos\theta = 0.8$, then $\sin 2\theta$ is**

ANSWER

Understand It with Pulse | Flag a mistake

6 **The coterminal angle between 0° and 360° coterminal with 720° is, in degrees**

ANSWER

Understand It with Pulse | Flag a mistake

7 **The exact value of cos 180° is**

A 1

B -1

C 0

D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

8 **In a right triangle with adjacent side 4 and hypotenuse 5 , cos θ is**



A $\frac{3}{5}$

B $\frac{4}{5}$

C $\frac{4}{3}$

D $\frac{5}{4}$

Understand It with Pulse | Flag a mistake

9 **In a right triangle with opposite side 3 and hypotenuse 5 , sin θ is**



A $\frac{3}{5}$

B $\frac{4}{5}$

C $\frac{3}{4}$

D $\frac{5}{3}$

Understand It with Pulse | Flag a mistake

10 **In the interval $0° \leq x \leq 360°$, the solutions of $\cos x = 0$ are**

- A 30 degrees only
- B 90 degrees and 270 degrees
- C 90 degrees only
- D 0 degrees and 90 degrees

Understand It with Pulse | Flag a mistake

11 **In the interval $0° \leq x \leq 360°$, the solutions of $\sin x = 0$ are**

- A 30 degrees only
- B 90 degrees only
- C 0 degrees, 180 degrees and 360 degrees
- D 0 degrees and 90 degrees

Understand It with Pulse | Flag a mistake

12 In the interval $0° \leq x \leq 360°$, the solutions of $\sin x = \frac{1}{2}$ are

- **A** 30 degrees and 150 degrees
- **B** 30 degrees only
- **C** 90 degrees only
- **D** 0 degrees and 90 degrees

Understand It with Pulse | Flag a mistake

13 $\sin^2 40° + \cos^2 40°$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The amplitude of $y = 5\cos(2x) - 3$ is**



A 5

B 2

C 3

D 8

Understand It with Pulse | Flag a mistake

15 The exact value of sin 30° is

- **A** $\frac{1}{2}$
- **B** $\sqrt{3}/2$
- **C** 1
- **D** 0

Understand It with Pulse | Flag a mistake

16 A circle has radius 8 units. An arc subtending a central angle of 1.5 radians has length

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The amplitude of y = 2 sin(3x - 0) + 5 is**

A 3

B 2

C 5

D 1

Understand It with Pulse | Flag a mistake

18 **The angle 90° in radians is**



A π/3

B π/2

C 3π/2

D 2π

Understand It with Pulse | Flag a mistake

19 **A sector of a circle of radius 4 units has central angle 3 radians. Its area is**

ANSWER

Understand It with Pulse | Flag a mistake

20 **If $\sin\theta = 0.5$ and $\cos\theta = 0.87$, then $\sin 2\theta$ is**

ANSWER

Understand It with Pulse | Flag a mistake

21 **The coterminal angle between 0° and 360° coterminal with 450° is, in degrees**

ANSWER

Understand It with Pulse | Flag a mistake

22 **The exact value of cos 60° is**

- **A** $\sqrt{3}/2$
- **B** 1
- **C** 0
- **D** $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

23 **A circle has radius 10 units. An arc subtending a central angle of 0.4 radians has length**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 The amplitude of $y = 4 \sin(1x - 2) + 3$ is

- A 1
- B 3
- C 4
- D 2

Understand It with Pulse | Flag a mistake

25 The angle 45° in radians is

- A $\pi/3$
- B $3\pi/2$
- C $\pi/4$
- D 2π

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	10	**10.**	B	**19.**	24
2.	A	**11.**	C	**20.**	0.87
3.	A	**12.**	A	**21.**	90
4.	36	**13.**	1	**22.**	D
5.	0.96	**14.**	A	**23.**	4
6.	0	**15.**	A	**24.**	C
7.	B	**16.**	12	**25.**	C
8.	B	**17.**	B		
9.	A	**18.**	B		

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