

## 11th Class FA Mathematics Chapter 10 Online Test

Sr	Questions	Answers Choice
1	The angles $90^\circ \pm \theta$ , $180^\circ \pm \theta$ , $270^\circ \pm \theta$ , $360^\circ \pm \theta$ , are the:	A. composite angles B. half angles C. quadrantal angles <b>D. allied angles</b>
2	Question Image	A. $-\cot \theta$ B. $-\tan \theta$ <b>C. <math>\tan \theta</math></b> D. none of these
3	$2 \sin \alpha \cos \beta =$	A. $\sin(\alpha + \beta) - \sin(\alpha - \beta)$ B. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ <b>C. <math>\sin(\alpha + \beta) + \sin(\alpha - \beta)</math></b> D. $\cos(\alpha + \beta) - \cos(\alpha - \beta)$
4	Question Image	<b>A. quad I</b> B. quad. II C. quad. III D. quad. IV
5	$2 \cos \alpha \sin \beta =$	A. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ B. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$ <b>C. <math>\sin(\alpha + \beta) - \sin(\alpha - \beta)</math></b> D. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$
6	Question Image	<b>D. none of these</b>
7	$2 \sin 12^\circ \sin 46^\circ =$	A. $\cos 34^\circ + \cos 58^\circ$ B. $\sin 34^\circ - \sin 58^\circ$ C. $\sin 34^\circ + \sin 58^\circ$ <b>D. <math>\cos 34^\circ - \cos 58^\circ</math></b>
8	$\sin(\alpha + \beta) =$	
9	$\sin(\theta - \pi) =$	
10	Question Image	<b>A. quad. I</b> B. quad. II <b>C. quad. III</b> D. quad. IV
11	$-2 \sin \alpha \sin \beta =$	A. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$ B. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ <b>C. <math>\cos(\alpha + \beta) - \cos(\alpha - \beta)</math></b> D. $\cos(\alpha - \beta) + \cos(\alpha - \beta)$
12	$\cos(\alpha - \beta) =$	<b>A. <math>\cos \alpha \cos \beta + \sin \alpha \sin \beta</math></b> B. $\cos \alpha \cos \beta - \sin \alpha \sin \beta$ C. $\cos \alpha \cos \beta + \sin \alpha \cos \beta$ D. $\sin \alpha \cos \beta - \sin \alpha \sin \beta$
13	$\sin 5\theta + \sin 3\theta$ is equal to:	A. $2 \cos 2\theta \sin \theta$ B. $-2 \cos 4\theta \sin \theta$ C. $-2 \sin 4\theta \cos \theta$ <b>D. <math>2 \sin 4\theta \cos \theta</math></b>
14	Question Image	
15	Question Image	
16	$\cot 1^\circ, \cot 2^\circ, \cot 3^\circ, \dots, \cot 89^\circ =$	<b>A. -1</b> <b>B. 1</b> C. $\infty$ D. none
17	Question Image	
18	Question Image	
19	Question Image	<b>A. <math>1 + \cos \theta</math></b> <b>B. <math>1 - \cos \theta</math></b>
		<b>A. quad. I</b>

- 20  $\sec(2\pi + \Theta)$ , where  $\Theta$  is a basic angle will have terminal side in:  
B. quad. II  
C. quad. III  
D. quad. IV
- 21  $\tan(-135^\circ) =$   
A. 0  
B. 1  
D.  $\sqrt{2}$
- 22 If  $\sin \alpha = \cos \beta$  in any triangle ABC then:  
A.  $\alpha + \beta = 90^\circ$   
B.  $\alpha + \beta = 180^\circ$   
C.  $\alpha + \beta = 360^\circ$   
D.  $\alpha + \beta$
- 23  $\tan(294^\circ) =$   
A.  $\tan 24^\circ$   
B.  $-\tan 24^\circ$   
C.  $\cot 24^\circ$   
D.  $-\cot 24^\circ$
- 24 If an angle  $\alpha$  is allied to an angle  $\beta$ , then  $\alpha \pm \beta =$  \_\_\_\_\_:  
A.  $90^\circ$   
B. multiple of  $90^\circ$   
C.  $180^\circ$   
D. multiple of  $180^\circ$
- 25 Question Image
- 26  $2 \cos \alpha \cos \beta =$   
A.  $\sin(\alpha + \beta) - \sin(\alpha - \beta)$   
B.  $\cos(\alpha + \beta) - \cos(\alpha - \beta)$   
C.  $\cos(\alpha + \beta) + \cos(\alpha - \beta)$   
D.  $\sin(\alpha + \beta) + \sin(\alpha - \beta)$
- 27 A reference angle  $\Theta$  is always:  
A.  $\cot \Theta$   
B.  $\tan \Theta$   
C.  $-\cot \Theta$   
D.  $-\tan \Theta$
- 28  $\tan(270^\circ + \Theta)$  is equal:  
A. quad. I  
B. quad. II  
C. quad. III  
D. quad. IV
- 29 The distance between the points  $P(x_1, y_1)$  and  $Q(x_2, y_2)$  is:
- 30 Question Image
- 31  $\csc(2\pi - \Theta)$ , where  $\Theta$  is a basic angle, will have terminal side in:  
A. quad. I  
B. quad. II  
C. quad. III  
D. quad. IV
- 32  $\tan(\alpha + \beta) =$
- 33  $\tan(\alpha - \beta) =$
- 34 Question Image
- 35  $\sin(\alpha - \beta) =$