

ECAT Mathematics Chapter 12 Trigonometric Functions and Identities Online Test

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| 24 | In any triangle ABC,with usual notation $a \sin \beta =$ _____; | A. $b \sin \alpha$ B. $b \sin \beta$ C. $a \sin \alpha$ D. None of these |
| 25 | The law of cosines reduces to $a^2 + c^2 = b^2$ for | A. $\alpha = 90^\circ$ B. $\beta = 90^\circ$ C. $\gamma = 90^\circ$ D. $\alpha + \beta + \gamma = 180^\circ$ |
| 26 | If ΔABC is right triangle then the law of Cosines reduces to | A. The Pythagoras Theorem B. The law of Sines C. The law of cosines D. The law of tangents |
| 27 | With usual notations $b^2 = a^2 + c^2 - 2ac \cos$ is called _____; | A. None of these B. Law of sines C. Law of cosines D. Law of tangents |
| 28 | $\cos 3a =$ _____; | A. $3 \sin a - 4 \sin^3 a$ B. $4 \sin a - 3 \sin^3 a$ C. $3 \cos^3 a - 4 \cos a$ D. $4 \cos a - 3 \cos^3 a$ |

D. $4\cos^3 a - 3\cos a$

29 $\sin 3a =$ _____;

- A. $3\sin a - 4\sin^3 a$
- B. $4\sin a - 3\sin^3 a$
- C. $3\cos^3 a - \cos a$
- D. $4\cos^3 a - 3\cos a$

30 $2\cos^2 \frac{a}{2} =$ _____;

- A. $1 + \sin a$
- B. $1 - \sin a$
- C. $1 + \cos a$
- D. $1 - \cos a$