

## Mathematics 10th Class English Medium Unit 7 Online Test

Sr	Questions	Answers Choice
1	$\tan 90^\circ = \underline{\hspace{2cm}}$	A. 1 B. 0 <b>C. Undefined</b> D. None of these
2	$\cos 60^\circ = \underline{\hspace{2cm}}$	A. $1/2$ <b>B. <math>\sqrt{3}/2</math></b> C. 2 D. $2/\sqrt{3}$
3	$\sin(-350^\circ)$ lies in $\underline{\hspace{2cm}}$ .	A. 1st quadrant B. 2nd quadrant C. 3rd quadrant D. 4th quadrant
4	$\sin^2\theta + \cos^2\theta = \underline{\hspace{2cm}}$ :	A. $\sin\theta$ B. $\cos\theta$ <b>C. 1</b> D. 2
5	$1/(1+\sin\theta) + 1/(1-\sin\theta)$	A. $2\sec^2\theta$ B. $2\cos^2\theta$ C. $\sec^2\theta$ D. $\cos\theta$
6	The symbol used to denote a degree is:	A. 100 <b>B. <math>1^\circ</math></b> C. 100' D. 1"
7	The $\underline{\hspace{2cm}}$ of a given point on a line segment is the foot of perpendicular drawn from the point on that line segment.	A. position B. co terminal <b>C. projection</b> D. standard position
8	360 degrees make 4 $\underline{\hspace{2cm}}$ angles:	A. Obtuse <b>B. Right</b> C. Acute D. Supplementary
9	Question Image	A. -1 <b>B. 1</b> C. 0
10	$20^\circ = \underline{\hspace{2cm}}$	A. $360'$ B. $630'$ <b>C. <math>1200'</math></b> D. $3600'$
11	$\cos 30^\circ = \underline{\hspace{2cm}}$	A. $1/2$ <b>B. <math>\sqrt{3}/2</math></b> C. 2 D. $2/\sqrt{3}$
12	In degree measurement, $1^\circ$ is equal to:	A. $1^\circ$ <b>B. <math>60^\circ</math></b> C. $90^\circ$ D. $360^\circ$
13	$\tan 30^\circ = \underline{\hspace{2cm}}$	A. $1/2$ <b>B. <math>\sqrt{3}/2</math></b> C. $\sqrt{3}$ D. $1/\sqrt{3}$

- 14 In which quadrant only  $\tan\theta$  and  $\cot\theta$  are positive.  
A. I  
B. II  
C. III  
D. IV
- 15 In which quadrants all trigonometric ratios are positive?  
A. I  
B. II  
C. III  
D. IV
- 16 A part of circumference of a circle is called.  
A. Radians  
B. Chord  
C. Sector  
D. Arc
- 17 Arms of an angle called:  
A. Terminal sides  
B. Rays  
C. Rotation of arms  
D. Position
- 18 In degree measurement .  $1'$  is equal to:  
A.  $1^\circ$   
B.  $60' = 1^\circ$   
C.  $90' = 1^\circ$   
D.  $360' = 1^\circ$
- 19  $\pi$  radians = .....  
A.  $0^\circ$   
B.  $90^\circ$   
C.  $180^\circ$   
D.  $360^\circ$
- 20  $\sec^2\theta = \dots$   
A.  $1 - \sin^2\theta$   
B.  $1 + \tan^2\theta$   
C.  $1 + \cos^2\theta$   
D.  $1 - \tan^2\theta$
- 21  $\sin\theta, \cosec\theta = \dots$   
A. 1  
B. 0  
C.  $\sin\theta$   
D.  $\cos\theta$
- 22 If  $\tan\theta = \sqrt{3}$ . then  $\theta$  is equal to .....  
A.  $90^\circ$   
B.  $45^\circ$   
C.  $60^\circ$   
D.  $30^\circ$
- 23  $\sec 30^\circ = \dots$   
A.  $1/2$   
B.  $\sqrt{3}/2$   
C. 2  
D.  $2/\sqrt{3}$
- 24 Fundamental trigonometric ratios are.  
A. 3  
B. 4  
C. 5  
D. 6
- 25 Diameter of a circle divides it into many parts?  
A. two;  
B. three;  
C. four;  
D. countless;
- 26  $\cos\theta, \sec\theta = \dots$   
A. 1  
B.  $\tan\theta$   
C. 0  
D.  $\cos\theta$
- 27 In which quadrant  $\theta$  lie when  $\sin\theta > 0, \tan\theta < 0$ ?  
A. I  
B. II  
C. III  
D. IV
- 28  $\sin(-310^\circ) = \dots$   
A.  $\sin 310^\circ$   
B.  $-\sin 310^\circ$   
C.  $\cos 310^\circ$   
D.  $\tan 310^\circ$
- 29 In which quadrant only  $\cos\theta$  and  $\sec\theta$  are positive?  
A. I  
B. II  
C. III  
D. IV
- 30  $\cot 60^\circ = \dots$   
A.  $1/\sqrt{3}$   
B.  $\sqrt{3}$   
C.  $1/2$   
D. 2
- 31 Question Image

- 32  $\pi/3$  radians =.....  
A.  $30^\circ$   
B.  $45^\circ$   
C.  $60^\circ$   
D.  $90^\circ$
- 33  $1^\circ$ =.....  
A.  $180\pi$  radian  
B.  $\pi$  radian  
C.  $\pi/180$  radian  
D.  $180/\pi$  radian
- 34 In which quadrant 0 lie when  $\cot \theta < 0$ ,  $\cos \theta < 0$ ?  
A. I  
B. II  
C. III  
D. IV
- 35  $3\pi/2$  Radian =\_\_\_\_\_  
A.  $30^\circ$   
B.  $135^\circ$   
C.  $180^\circ$   
D.  $270^\circ$
- 36  $\operatorname{cosec}^2 \theta - \cot^2 \theta$  =.....  
A. -1  
B. 1  
C. 0  
D.  $\tan \theta$
- 37  $1 + \operatorname{cot}^2 \theta$   
A.  $\sin^2 \theta$   
B.  $\cos^2 \theta$   
C.  $\operatorname{cosec}^2 \theta$   
D.  $\sec^2 \theta$
- 38 In which quadrant 0 lie when  $\sec \theta < 0$ ,  $\sin \theta < 0$ ?  
A. I  
B. II  
C. III  
D. IV
- 39 A straight line which cuts the circumference of a circle in two distinct points is called:  
A. chord;  
B. secant;  
C. tangent;  
D. sector;
- 40 A circle of radius 'r' has a circumference of:  
A.  $\pi r^2$   
B.  $2\pi r$   
C.  $2\pi r^2$   
D.  $1/2\pi r$
- 41  $1 + \tan^2 \theta$  =\_\_\_\_\_  
A.  $\sin^2 \theta$   
B.  $\cos^2 \theta$   
C.  $\operatorname{cosec}^2 \theta$   
D.  $\sec^2 \theta$
- 42 The distance of any point of the circle to its center is called:  
A. radius;  
B. diameter;  
C. a chord;  
D. an arc
- 43  $\operatorname{ctg} 60^\circ$  =.....  
A.  $1/2$   
B.  $\sqrt{3}/2$   
C.  $\sqrt{3}$   
D.  $1/\sqrt{3}$
- 44  $\operatorname{cot} 45^\circ$  =\_\_\_\_\_  
A.  $1/2$   
B.  $-1/2$   
C.  $1/\sqrt{2}$   
D. 1
- 45 Question Image
- 46 The radian measure of an angle that form a complete circle is.  
A.  $\pi/2$   
B.  $\pi$   
C.  $2\pi$   
D.  $4\pi$
- 47 The union of two non-collinear rays, which have common end point is called:  
A. An angle  
B. Degree  
C. A minute  
D. A radian

- 48 If  $\tan\theta = \sqrt{3}$  then  $\theta$  is equal to .  
A.  $30^\circ$   
B.  $45^\circ$   
C.  $60^\circ$   
D.  $90^\circ$
- 49  $\cot 30^\circ = \dots$ .  
A.  $1/2$   
B.  $\sqrt{3}/2$   
C.  $\sqrt{3}$   
D.  $1/\sqrt{3}$
- 50 If  $\tan\theta = 1$  then  $\sin\theta = \dots$  when  $\theta$  lies in 3rd quadrant.  
A.  $1/2$   
B.  $-1/2$   
C.  $-1/\sqrt{2}$   
D.  $1/\sqrt{2}$
- 51 The union of two non-collinear rays with common end point is called a/an:  
A. Ray  
B. Side  
C. Angle  
D. Vertx
- 52 A circle of radius 'r' has area:  
A.  $\pi r^2$   
B.  $2\pi r$   
C.  $2\pi r^2$   
D.  $1/2\pi r$
- 53  $3\pi/4$  radian =  
A.  $115^\circ$   
B.  $135^\circ$   
C.  $150^\circ$   
D.  $30^\circ$
- 54 Question Image
- 55 Which one is a quadrantal angle?  
A.  $30^\circ$   
B.  $45^\circ$   
C.  $60^\circ$   
D.  $90^\circ$
- 56 In a unit circle,  $\cos\theta = \dots$   
A. y  
B. x  
C.  $y/x$   
D. None of these
- 57 In which quadrant only  $\sin\theta$  and  $\cos\theta$  are positive?  
A. I  
B. II  
C. III  
D. IV
- 58  $1/\sin\theta = \dots$ .  
A.  $\cos\theta$   
B.  $\sec\theta$   
C.  $\csc\theta$   
D.  $\cot\theta$
- 59  $1/\tan\theta = \dots$ .  
A.  $\tan\theta$   
B.  $\sec\theta$   
C.  $\csc\theta$   
D.  $\cot\theta$
- 60 The D° M' S" form of  $32.25^\circ$  is:  
A.  $32^\circ 05'$   
B.  $32^\circ 10'$   
C.  $32^\circ 15'$   
D.  $32^\circ 20'$
- 61 In a circle, the tangents drawn at the ends of a chord make equal \_ with that chord  
A. square  
B. angle  
C. cube  
D. circle
- 62  $1^\circ$  into radians is:  
A. 0.0195 radians  
B. 0.0165 radians  
C. 0.0185 radians  
D. 0.0175 radians
- 63 The union of two noncollinear rays, which have common endpoint is called  
A. An angle  
B. A degree  
C. A minute  
D. A raian
- 64  $\cot\theta = \dots$   
A.  $\sin\theta/\cos\theta$   
B.  $1/\cos\theta$   
C.  $\cos\theta/\sin\theta$   
D.  $1/\sin\theta$
- 65 In which quadrant Q lie when  $\sin Q > 0$ ,  $\cos Q < 0$   
A. I  
B. II

65	In which quadrant of the unit circle, $\sin\theta < 0, \cos\theta < 0$ ?	C. III D. IV
66	$\operatorname{Co sec} 30^\circ = \dots$	A. $1/2$ B. $\sqrt{3}/2$ C. 2 D. $2/\sqrt{3}$
67	$\sin\theta \cos\theta = \dots$	A. $\sin\theta$ B. $1/\cos\theta$ C. $1/\sin\theta$ D. $\sin\theta/\cos\theta$
68	The system of measurement in which angle is measured in radian is called.	A. C.G.S System B. Sexagesimal system C. M.K.S. System D. circular system
69	$\operatorname{Co sec} 60^\circ = \dots$	A. $1/2$ B. $\sqrt{3}/2$ C. 2 D. $2/\sqrt{3}$
70	$1^\circ = \dots$	A. 0.0175 radians B. 0.175 radians C. 1.75 radians D. 175 radians
71	If 'r' is the radius of a circle, then its circumference is.	A. $\pi/2r$ B. $\pi r$ C. $2\pi r$ D. $4\pi r$
72	Area of $\Delta ABC = :$	A. $1/2(\text{base})(\text{altitude})$ B. $2(\text{base})(\text{altitude})$ C. $1/2 \times \text{base}/\text{altitude}$ D. $(\text{base})(\text{altitude})$
73	60 seconds makes _____ minute:	A. 1 B. 2 C. 3 D. 4
74	Question Image	A. $90^\circ$ B. $45^\circ$ C. $60^\circ$ D. $30^\circ$
75	$1/(1+\sin\theta) + 1/(1-\sin\theta)$	A. $2 \sec^2\theta$ B. $2 \cos^2\theta$ C. $\sec^2\theta$ D. $\cos\theta$
76	Angles between $180^\circ$ and $270^\circ$ are to which quadrant?	A. I B. II C. III D. IV
77	The decimal degrees of $25^\circ 30'$ is:	A. $25.2^\circ$ B. $25.3^\circ$ C. $25.4^\circ$ D. $25.5^\circ$
78	$\sec\theta \cot\theta = \dots$	A. $\sin\theta$ B. $1/\sin\theta$ C. $1/\cos\theta$ D. $\sin\theta / \cos\theta$
79	Question Image	
80	$\pi/4$ radians = .....	A. $30^\circ$ B. $60^\circ$ C. $45^\circ$ D. $90^\circ$
81	$1/2 \operatorname{sosec} 45^\circ$	A. $1/2\sqrt{2}$ B. $1/\sqrt{2}$ C. $\sqrt{2}$ D. $\sqrt{3}/2$
82	If the rotation of the rays is anti-clock wise, the angle has _____ measure:	A. Positive B. Radian C. Standard D. Negative
83	A part of the circumference of a circle is called:	A. A segment B. A sector C. An arc

- 84 An angle which is equal to  $90^\circ$  is called:  
 A. right angle  
 B. obtuse angle;  
 C. acute angle;  
 D. none of these;
- 85  $\sin 30^\circ = \dots$   
 A.  $1/2$   
 B.  $\sqrt{3}/2$   
 C. 2  
 D.  $2/\sqrt{3}$
- 86 Pi radians is equal to:  
 A.  $150^\circ$   
 B.  $160^\circ$   
 C.  $180^\circ$   
 D.  $240^\circ$
- 87  $\sec^2 \theta = \dots$   
 A.  $1 - \sin^2 \theta$   
 B.  $1 - \tan^2 \theta$   
 C.  $1 + \cos^2 \theta$   
 D.  $1 - \tan^2 \theta$
- 88  $1 + \tan^2 \theta = \dots$   
 A.  $\sin^2 \theta$   
 B.  $\cos^2 \theta$   
 C. Co Sec $\theta$   
 D.  $\sec^2 \theta$
- 89 The union of two noncollinear rays, which have common end point is called.  
 A. A Radian  
 B. A Minute  
 C. A degree  
 D. An angle
- 90 In which quadrant O lie when  $\cos \theta < 0, \sin \theta < 0$ ?  
 A. I  
 B. II  
 C. III  
 D. IV
- 91 The system of measurement in which the angle is measured in radian is called.  
 A. CGS system  
 B. Sexagesimal system  
 C. Circular system  
 D. MSK system
- 92  $20^\circ = \dots$   
 A.  $360'$   
 B.  $630'$   
 C.  $1200'$   
 D.  $360'$
- 93 Tangent drawn at the ends of diameter of a circle of \_\_\_\_\_ to each other:  
 A. parallel;  
 B. perpendicular;  
 C. collinear;  
 D. none parallel;
- 94  $45^\circ = \dots$  radian.  
 A.  $\pi/3$   
 B.  $\pi/4$   
 C.  $\pi/6$   
 D.  $\pi/2$
- 95 1 minute = \_\_\_\_\_ degree  
 A.  $1/60$   
 B. 60  
 C.  $1/3600$   
 D. 3600
- 96  $\sec(-60^\circ) = \dots$   
 A.  $-\sec 60^\circ$   
 B.  $\sec 60^\circ$   
 C.  $\cos 60^\circ$   
 D.  $\cot 60^\circ$
- 97 The system of measurement in which the angle is measured in radians is called:  
 A. CGS system  
 B. Sexagesimal system  
 C. MKS system  
 D. Circular system
- 98  $20^\circ = \dots$   
 A.  $360^\circ$   
 B.  $630^\circ$   
 C.  $1200^\circ$   
 D.  $3600^\circ$
- 99 Question Image  
 A.  $115^\circ$   
 B.  $135^\circ$   
 C.  $150^\circ$   
 D.  $30^\circ$
- 100 1 radian is equal to:  
 A.  $57^\circ 16' 45''$   
 B.  $57^\circ 17' 45''$   
 C.  $57^\circ 18' 55''$   
 D.  $57^\circ 17' 35''$
- 101 A line which has only one point in common with a circle is called:  
 A. chord;  
 B. secant;

		C. tangent D. sector
102	$3\pi/4$ radians =.....	A. $115^\circ$ B. $135^\circ$ C. $150^\circ$ D. $30^\circ$
103	The symbol used to denote a second is:	A. $1^\circ$ , $1'$ B. $1^\circ$ C. $1''$ D. $1'$
104	$\tan\theta, \cot\theta =$ .....	A. $\sin\theta$ B. $\sec\theta$ C. 1 D. 0
105	An arc which is shorter than the half of the circumference is called:	A. minor arc B. major arc C. segment D. semi arc
106	$3\pi/2$ radians =.....	A. $90^\circ$ B. $180^\circ$ C. $270^\circ$ D. $360^\circ$
107	$\sec 45^\circ =$ .....	A. 1 B. $\sqrt{2}$ C. $1/\sqrt{2}$ D. 0
108	The common end point of arms of an angle is known as:	A. Angles B. Arms C. Vertex D. Rays
109	$1/\cos\theta =$ .....	A. $\sin\theta$ B. $\sec\theta$ C. $\operatorname{cosec}\theta$ D. $\cos\theta$
110	The length of a tangent to a circle is from the given point to the point of:	A. start point B. enc points C. contact D. collinear
111	$\tan 60^\circ =$ .....	A. $1/2$ B. $\sqrt{3}/2$ C. $\sqrt{3}$ D. $1/\sqrt{3}$
112	A _____ is the locus of a moving point P in a plane which is equidistant forms some fixed point O.	A. circle B. diameter C. chord D. circumference
113	If an object is above the level of observation then angle formed between the horizontal line and observer's line of sight is called:	A. Angle of dispersion B. Angle of elevation C. Obtuse angle D. None of these
114	Angles between $0^\circ$ and $90^\circ$ are to which quadrant?	A. I B. II C. III D. IV
115	$\operatorname{cosec}^2\theta - \cot^2\theta =$ _____	A. -1 B. 1 C. 0 D. $\tan\theta$
116	90 degree makes _____ right angle:	A. 2 B. 4 C. 1 D. 3
117	The symbol used to denote a minute is:	A. $1''$ B. $1'$ C. $1^\circ$ D. $1'''$
118	$\operatorname{cosec} 45^\circ =$ .....	A. 1 B. $\sqrt{2}$ C. $1/\sqrt{2}$ D. 0

- 119 Formula of arc length is.  
A.  $\theta = \frac{l}{r}$   
B.  $r = l\theta$   
C.  $\theta = lr$   
D.  $l = r/\theta$
- 120  $2\pi$  radian = .....  
A.  $0^\circ$   
B.  $90^\circ$   
C.  $180^\circ$   
D.  $360^\circ$
- 121  $\pi/2$  radians = .....  
A.  $30^\circ$   
B.  $45^\circ$   
C.  $60^\circ$   
D.  $90^\circ$
- 122  $\sin 60^\circ$  = .....  
A.  $1/2$   
B.  $\sqrt{3}/2$   
C.  $2$   
D.  $2/\sqrt{3}$
- 123  $\pi/6$  radians = .....  
A.  $30^\circ$   
B.  $60^\circ$   
C.  $45^\circ$   
D.  $90^\circ$
- 124  $\cot 45^\circ$  = .....  
A. 1  
B.  $\sqrt{2}$   
C.  $1/\sqrt{2}$   
D. 0
- 125 Triangle with sides 5cm , 7cm 8cm is a \_\_\_\_\_ triangle:  
A. obtuse angle  
B. right angle  
C. acute angle  
D. quadrant angle
- 126 How many right angles are there in 360 degree?  
A. Two  
B. Four  
C. Six  
D. Eight
- 127  $\sin^2\theta + \cos^2\theta$  = .....  
A.  $\tan 2\theta$   
B.  $\cos 2\theta$   
C. 1  
D. 0
- 128 If the rotation of the ray is clock wise, the angle has \_\_\_\_\_ measure:  
A. Degree  
B. Negative  
C. Positive  
D. Standard
- 129 In which quadrant 0 lie when  $\cos\theta < 0$ .  $\tan\theta < 0$ ?  
A. I  
B. II  
C. III  
D. IV
- 130  $1/2 \csc 45^\circ$  = .....  
A.  $1/2\sqrt{2}$   
B.  $1/\sqrt{2}$   
C.  $\sqrt{2}$   
D.  $\sqrt{3}/2$