THE WISDOM ACADEMY

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Class: 9th	Test#08: Math	Total Marks:40	Chap#6&2

Student Name: _____   Roll No: _____

Q: 01 Encircle the correct option: (1x10)

1 The value of $\tan^{-1} 2$ in radians is:

a) $\frac{\pi}{2}$	b) $\frac{3\pi}{2}$	c) $0.4636\,\pi$	d) 1.1071

2 $292.5° = $ _____ rad

a) $\frac{17\pi}{6}$	b) $\frac{17\pi}{4}$	c) $1.6\,\pi$	d) $1.625\,\pi$

3 $\sin 60° = $ _____ .

a) 1	b) $\frac{1}{2}$	c) $\sqrt{(3)^2}$	d) $\frac{\sqrt{3}}{2}$

4 $\cos^2 100\,\pi + \sin^2 100\,\pi = $ _____ .

a) 1	b) 3	c) 4	d) 2

5 $\dfrac{1}{\cot\theta} = $

a) $\sin\theta$	b) $\frac{\sin\theta}{\cos\theta}$	c) $\frac{\cos\theta}{\sin\theta}$	d) $\cos^2\theta$

6 $\sin^2\theta + \cos^2\theta = $ _____ .

a) 0	b) 1	c) 2	d) 3

7 $(\sec^2\theta - 1)\cos^2\theta = $ ____?

a) $\sin^2\theta$	b) $\cos^2\theta$	c) $\tan^2\theta$	d) $\operatorname{cosec}^2\theta$

8 $2\tan 45° = $ _____

a) 0	b) 2	c) 3	d) $\frac{1}{2}$

9 In triangle ABC, if angle A = 90°, $\tan B = \frac{3}{4}$ and then $\sin B = $?

a) $\frac{3}{4}$	b) $\frac{4}{5}$	c) $\frac{5}{3}$	d) $\frac{3}{5}$

10 In a right triangle, the longest side is called the:

a) base	b) height	c) hypotenuse	d) base

Q: 02 Solve these Given Questions:

1) Convert 109.42° into degrees, minutes and seconds.

2) If $\sin\Theta = \frac{3}{5}$ find the other trigonometric ratio, when θ lies in first quadrant.

3) Solve triangle ABC, when m∠A = 60°, b = 5 cm, m∠B = 90°

4) Find the trigonometric ratios of 30° ($\frac{\pi}{6}\ radian$) with the help of diagram.

5) How we can find secθ?

6) What do you mean by Degree?

7) What is right angle?

8) Solve triangle ABC, when a = $\sqrt{2}$cm, c = 1 cm and m∠B = 90°

9) Evaluate: sin230° + cos230°

10) If a right triangle has sides of lengths of 5cm and 12cm. What is the length of hypotenuse?

Q: 03 Solve these Long Questions:

A. Find the value of x in each case: (i) $\log_5 25 = x$ (ii) $\log_2 x = 6$

B. Find the values of the following with the help of logarithm table: 319.8×3.543