Question 1

Complete

Mark 5.00 out of 5.00

$\sinh x = \frac{4}{3}$ *then* $\cosh x = ?$

Select one:

- $\pm\frac{3}{5}$
- $\pm\frac{5}{3}$
- $\pm\frac{\sqrt{7}}{3}$
- $\pm\frac{1}{3}$

The correct answer is:

$\pm\frac{5}{3}$

Question 2

Complete

Mark 5.00 out of 5.00

Mark Your attendance.

Select one:

- a. Absent
- b. Present

The correct answers are: Present, Absent

Question 3

Complete

Mark 0.00 out of 5.00

Roots of $x^{16} + i = 0$ are

Select one:

a.
$\cos\{(4k+1)\pi/32\} - i\sin\{(4k+1)\pi/32\} \quad ,k = 0,1,2,..,..,15$

b.
$\cos\{(4k+1)\pi/16\} + i\sin\{(4k+1)\pi/16\} \quad ,k = 0,1,2,..,..,15$

c.
$\cos\{(4k+1)\pi/32\} + i\sin\{(4k+1)\pi/32\} \quad ,k = 0,1,2,..,..,15$

d.
$\cos\{(4k+1)\pi/16\} - i\sin\{(4k+1)\pi/16\} \quad ,k = 0,1,2,..,..,15$

The correct answer is:
$\cos\{(4k+1)\pi/32\} - i\sin\{(4k+1)\pi/32\} \quad ,k = 0,1,2,..,..,15$

Question 4

Complete

Mark 5.00 out of 5.00

If $x = \left(\cos \frac{\pi}{14} + i \sin \frac{\pi}{14}\right), y = \left(\cos \frac{9\pi}{14} + i \sin \frac{9\pi}{14}\right)$ *then* $x^5 y^{15} = ?$

Select one:

- $e^{i10\pi}$
- $e^{i20\pi}$
- $e^{i15\pi}$
- $e^{i5\pi}$

The correct answer is:

$e^{i10\pi}$

Question 5

Complete

Mark 5.00 out of 5.00

If $x + iy = 2\cosh\left(\alpha + i\frac{\pi}{4}\right)$, the value of $x^2 - y^2$ is

Select one:

- a. 0.5
- b. 0
- c. 1
- d. 2

The correct answer is: 2