

Started on	sabato, 5 luglio 2025, 3:55 AM
State	Finished
Completed on	sabato, 5 luglio 2025, 3:56 AM
Time taken	8 secs
Marks	0/10
Grade	0 out of 100

Question 1

Not answered

Marked out of 1

If not specified otherwise, fill in the blanks with **integers (possibly 0 or negative)**. A fraction should be **reduced** (for example, $\frac{1}{2}$ is accepted but not $\frac{2}{4}$), and if it is negative and the answer boxes (such as $\frac{\boxed{a}}{\boxed{b}}$) have ambiguity, the negative sign should be put on the numerator (for example $\frac{-1}{2}$ is accepted but $\frac{1}{-2}$ is not). $\log x = \log_e x$, not $\log_{10} x$.

Complete the formulae, with $0 \leq \frac{\boxed{a}}{\boxed{b}}\pi \leq \pi$.

$$\cos\left(\frac{\boxed{a}}{\boxed{b}}\pi\right) = -\frac{1}{\sqrt{2}}.$$

$\boxed{a}$:  $\boxed{b}$: 

Question 2

Not answered

Marked out of 1

If not specified otherwise, fill in the blanks with **integers (possibly 0 or negative)**. A fraction should be **reduced** (for example, $\frac{1}{2}$ is accepted but not $\frac{2}{4}$), and if it is negative and the answer boxes (such as $\frac{\boxed{a}}{\boxed{b}}$) have ambiguity, the negative sign should be put on the numerator (for example $\frac{-1}{2}$ is accepted but $\frac{1}{-2}$ is not). $\log x = \log_e x$, not $\log_{10} x$.

Solve the following inequality.

$$x^2 + 4x + 3 < 0.$$

The solution is $\boxed{a} < x < \boxed{b}$.

$\boxed{a}$:  $\boxed{b}$: 

Question 3

Not answered

Marked out of 1

If not specified otherwise, fill in the blanks with **integers (possibly 0 or negative)**. A fraction should be **reduced** (for example, $\frac{1}{2}$ is accepted but not $\frac{2}{4}$), and if it is negative and the answer boxes (such as $\frac{\boxed{a}}{\boxed{b}}$) have ambiguity, the negative sign should be put on the numerator (for example $\frac{-1}{2}$ is accepted but $\frac{1}{-2}$ is not). $\log x = \log_e x$, not $\log_{10} x$.
Evaluate the following.

$$\log_5 \frac{1}{5} + \log_4 \frac{1}{2} = \frac{\boxed{a}}{\boxed{b}}.$$

$\boxed{a}$: ✖ $\boxed{b}$: ✖

Question 4

Not answered

Marked out of 1

If not specified otherwise, fill in the blanks with **integers (possibly 0 or negative)**. A fraction should be **reduced** (for example, $\frac{1}{2}$ is accepted but not $\frac{2}{4}$), and if it is negative and the answer boxes (such as $\frac{\boxed{a}}{\boxed{b}}$) have ambiguity, the negative sign should be put on the numerator (for example $\frac{-1}{2}$ is accepted but $\frac{1}{-2}$ is not). $\log x = \log_e x$, not $\log_{10} x$.
Find the value $x = \frac{\boxed{a}}{\boxed{b}}$ satisfying

$$(e^x)^4 \sqrt{e} = e^2.$$

$\boxed{a}$: ✖ $\boxed{b}$: ✖

Question 5

Not answered

Marked out of 1

If not specified otherwise, fill in the blanks with **integers (possibly 0 or negative)**. A fraction should be **reduced** (for example, $\frac{1}{2}$ is accepted but not $\frac{2}{4}$), and if it is negative and the answer boxes (such as $\frac{\boxed{a}}{\boxed{b}}$) have ambiguity, the negative sign should be put on the numerator (for example $\frac{-1}{2}$ is accepted but $\frac{1}{-2}$ is not). $\log x = \log_e x$, not $\log_{10} x$.
Find all values $x = \frac{\boxed{a}}{\boxed{b}}$ ($\boxed{a} < \boxed{b}$) satisfying

$$(x^2 + 4)^{\frac{1}{3}} = 2.$$

$\boxed{a}$: ✖ $\boxed{b}$: ✖

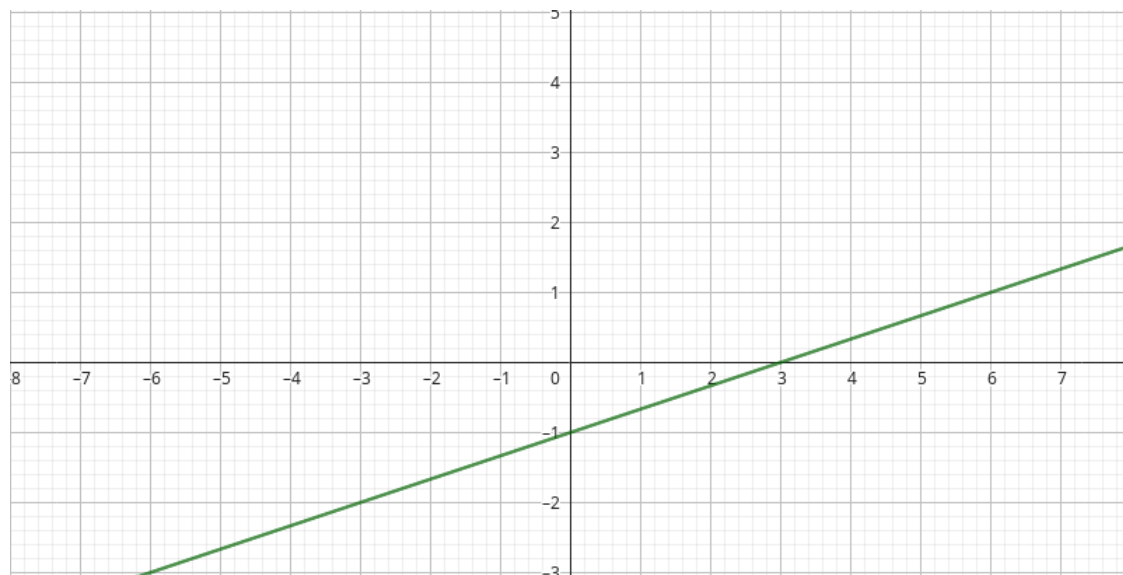
Question 6

Not answered

Marked out of 1

The graph of the function $f(x) = ax + b$ is shown. Find $a = \frac{\boxed{a}}{\boxed{b}}$ and $b = \boxed{c}$.

$\boxed{a}$: $\times$ $\boxed{b}$: $\times$ $\boxed{c}$: $\times$

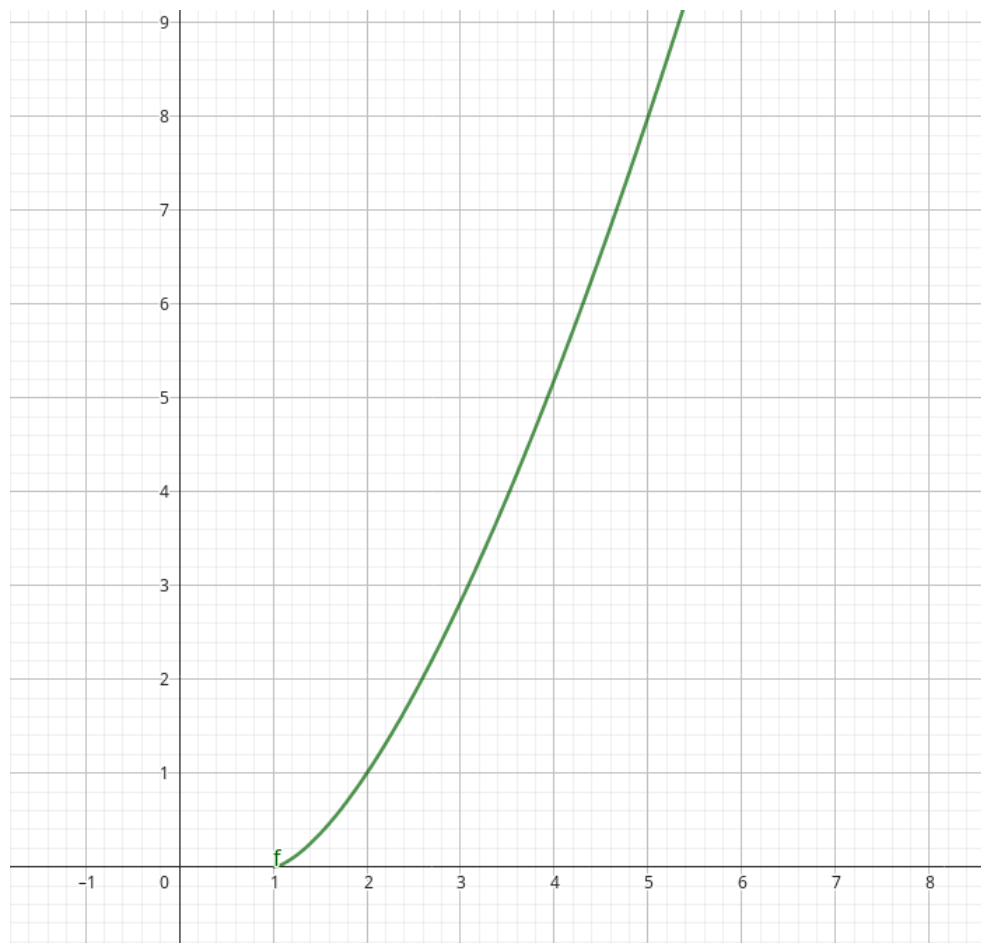


Question 7

Not answered

Marked out of 1

The graph of the function $f(x) = (x + r)^p$ is shown. Find $r = \boxed{\text{a}}$ and $p = \frac{\boxed{\text{b}}}{\boxed{\text{c}}}$.



Question 8

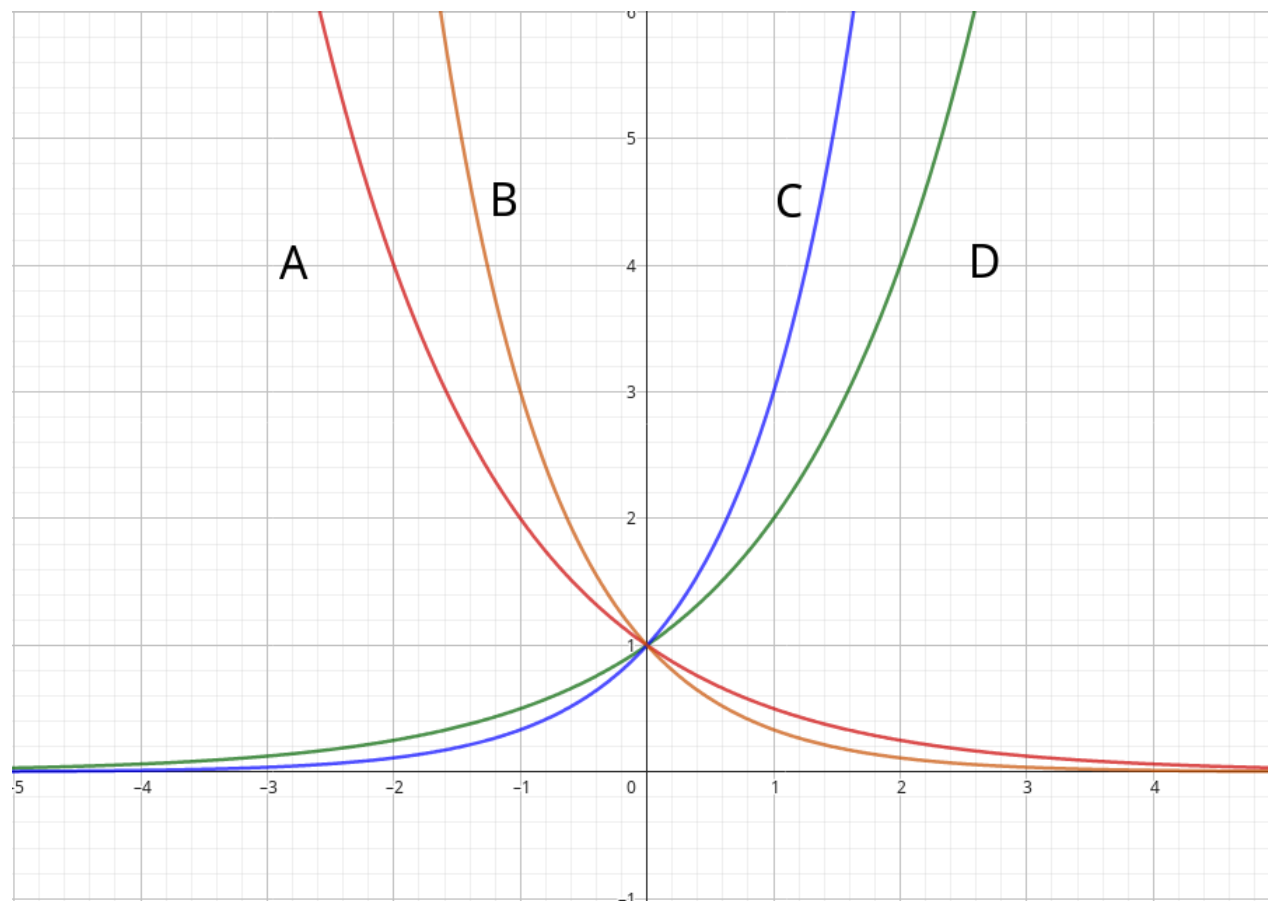
Not answered

Marked out of 1

Choose the graph of $f(x) = 3^x$.

- ☐ A
- ☐ B
- ☐ C
- ☐ D

The correct answer is: C



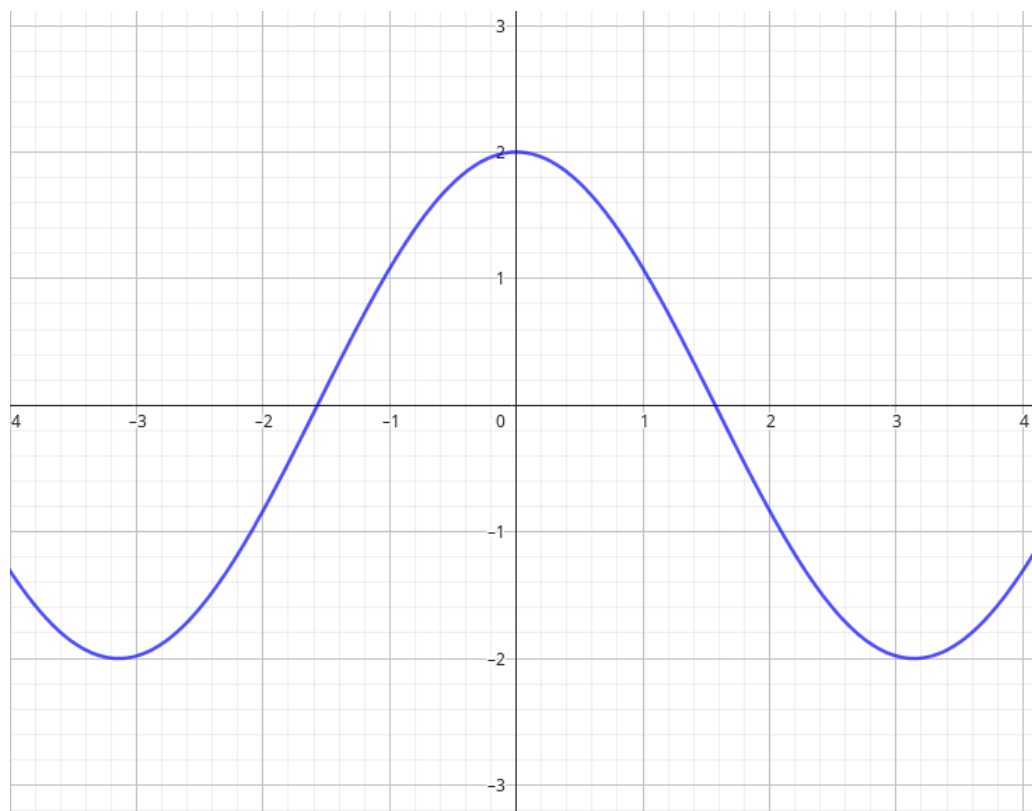
Question 9

Not answered

Marked out of 1

The graph of the function $f(x) = A \cos(Bx)$ is shown. Find $A = \boxed{a}$, $B = \boxed{b}$ with $B > 0$ (they are integers).

$\boxed{a}$: $\times$ $\boxed{b}$: $\times$



Question 10

Not answered

Marked out of 1

The graph of the function $f(x) = \log_A(x)$ is shown. Find $A = \boxed{a}$.

$\boxed{a}$: $\times$

