

Info 1**Midterm 1, Fall 2023**

NAME*

NEPTUN CODE*

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1. (A) The price is \$5. (B) wrong source

Source	Output
The price is \\$5.	A
The price is \$5.	B

2. (A) $\frac{a}{b}c$ (B) $\frac{ab}{c}$ (C) $\frac{a}{bc}$ (D) $a\frac{b}{c}$ (E) wrong source

Source	Output
$\$\\frac{ab}c\$$	B
$\$a\\frac{bc}\$$	E
$\$\\frac{abc}\$$	A
$\$a\\frac{bc}\$$	D
$\$\\frac{a}{bc}\$$	C

3. (A) a_{ij} (B) $a_{i,j}$ (C) a_{i_j} (D) wrong source

Source	Output
$\$a_i_j\$$	D
$\$a_ij\$$	B
$\$a_ \{i_j\}\$$	C
$\$a_ \{ij\}\$$	A

4. (A)

$$\begin{aligned}\sin(x + y) &= \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y &= \cos(x + y)\end{aligned}$$

- (B)

$$\begin{aligned}\sin(x + y) &= \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y &= \cos(x + y)\end{aligned}$$

(C)

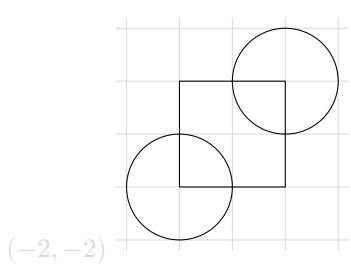
$$\begin{aligned}\sin(x+y) &= \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y &= \cos(x+y)\end{aligned}$$

(D) wrong source

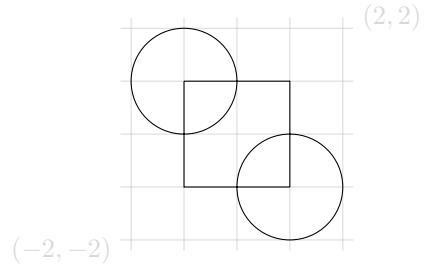
Source	Output
\begin{equation*} \sin(x+y) = \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y = \cos(x+y) \end{equation*}	D
\begin{multiline*} \sin(x+y) = \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y = \cos(x+y) \end{multiline*}	B
\begin{align*} \sin(x+y) &= \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y &= \cos(x+y) \end{align*}	C
\begin{gather*} \sin(x+y) = \sin x \cos y + \cos x \sin y, \\ \cos x \cos y - \sin x \sin y = \cos(x+y) \end{gather*}	A

5.

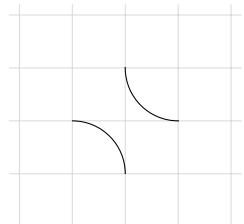
(A)



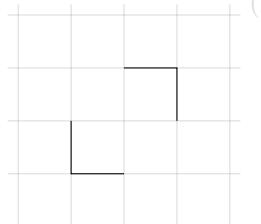
(B)



(C)



(D)



(E) wrong source

Source	Output
<pre>\begin{tikzpicture} \draw[very thin, gray!30] (-2.2,-2.2) node[below, left]{\$(-2,-2)\$} grid (2.2,2.2) node[above, right]{\$(2,2)\$}; \draw (1,-1) circle (1) -- ++(0,2) -- ++(-2,0) circle (1) -- ++(0,-2) -- ++(2,0); \end{tikzpicture}</pre>	B
<pre>\begin{tikzpicture} \draw[very thin, gray!30] (-2.2,-2.2) node[below, left]{\$(-2,-2)\$} grid (2.2,2.2) node[above, right]{\$(2,2)\$}; \draw (-1,-1) circle (1) -- (1,-1) -- (1,1) circle (1) -- (-1,1) -- (-1,-1) \end{tikzpicture}</pre>	E
<pre>\begin{tikzpicture} \draw[very thin, gray!30] (-2.2,-2.2) node[below, left]{\$(-2,-2)\$} grid (2.2,2.2) node[above, right]{\$(2,2)\$}; \draw (-1,-1) circle (1) -- (1,-1) -- (1,1) circle (1) -- (-1,1) -- (-1,-1); \end{tikzpicture}</pre>	A
<pre>\begin{tikzpicture} \draw[very thin, gray!30] (-2.2,-2.2) node[below, left]{\$(-2,-2)\$} grid (2.2,2.2) node[above, right]{\$(2,2)\$}; \clip (-1,-1) circle (1) (1,1) circle (1); \draw (-1,-1) rectangle (1,1); \end{tikzpicture}</pre>	D
<pre>\begin{tikzpicture} \draw[very thin, gray!30] (-2.2,-2.2) node[below, left]{\$(-2,-2)\$} grid (2.2,2.2) node[above, right]{\$(2,2)\$}; \clip (-1,-1) rectangle (1,1); \draw (-1,-1) circle (1) (1,1) circle (1); \end{tikzpicture}</pre>	C