

ĐÁP ÁN MÃ ĐỀ 501

1C	2C	3C	4C	5A	6C	7A	8C	9B	10B
11C	12C	13D	14C	15C	16A	17A	18C	19C	20D
21D	22D	23B	24A	25C	26B	27A	28C	29A	30D

ĐÁP ÁN MÃ ĐỀ 502

1C	2A	3C	4C	5C	6C	7A	8C	9B	10C
11B	12D	13C	14C	15A	16A	17C	18B	19D	20C
21D	22C	23D	24C	25A	26A	27B	28C	29D	30A

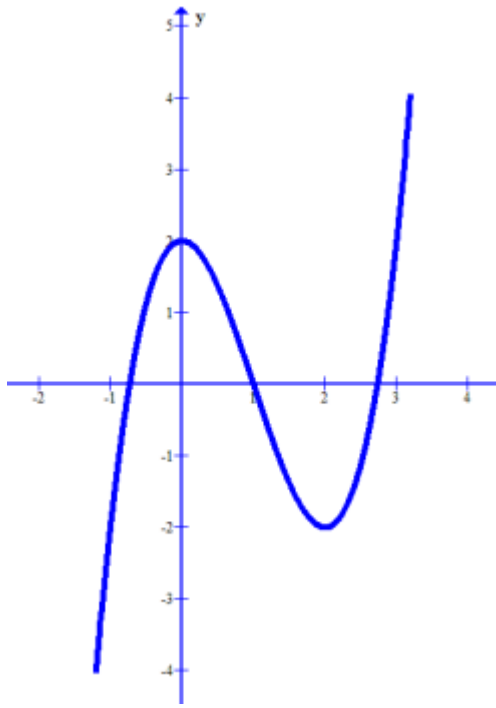
ĐÁP ÁN MÃ ĐỀ 503

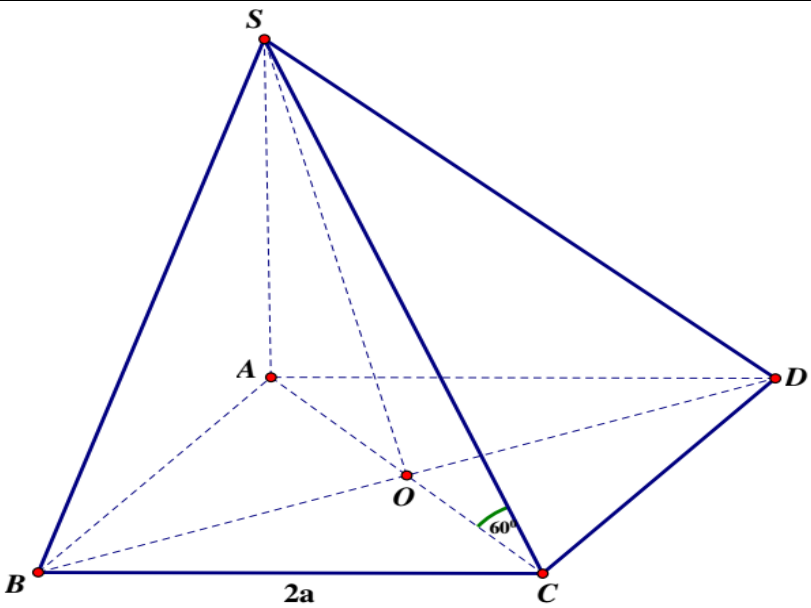
1D	2C	3D	4D	5B	6C	7B	8A	9A	10A
11C	12D	13A	14C	15C	16C	17C	18C	19A	20C
21B	22B	23D	24C	25C	26A	27C	28C	29C	30A

ĐÁP ÁN MÃ ĐỀ 504

1C	2D	3B	4D	5A	6D	7A	8C	9C	10B
11D	12A	13C	14C	15C	16A	17A	18C	19C	20C
21B	22C	23C	24C	25B	26D	27C	28A	29A	30C

ĐÁP ÁN TỰ LUẬN (Đề 501–502–503–504)

Câu 1: $y = f(x) = x^3 - 3x^2 + 2$		1đ																
• $D = \mathbb{R}$.																		
• $y' = 3x^2 - 6x$; $y' = 0 \Leftrightarrow x = 0 \vee x = 2$		0.25																
• BBT:		0.5																
<table><tr><td>x</td><td>$-\infty$</td><td>0</td><td>2</td><td>$+\infty$</td></tr><tr><td>y'</td><td>+</td><td>0</td><td>-</td><td>0</td><td>+</td></tr><tr><td>y</td><td>$-\infty$</td><td>2</td><td>-2</td><td>$+\infty$</td></tr></table>		x	$-\infty$	0	2	$+\infty$	y'	+	0	-	0	+	y	$-\infty$	2	-2	$+\infty$	
x	$-\infty$	0	2	$+\infty$														
y'	+	0	-	0	+													
y	$-\infty$	2	-2	$+\infty$														
• <u>Đồ thị:</u>		0.25																
																		
Câu 2: $y = \frac{mx + 4m}{x + 2m}$ đồng biến.		1đ																
• $D = \mathbb{R} \setminus \{-2m\}$																		
• $y' = \frac{2m^2 - 4m}{(x + 2m)^2}$		0.25																
• $Y_{cbt} \Leftrightarrow y' > 0$; $\forall x \in D$		0.25																
$\Leftrightarrow 2m^2 - 4m > 0$		0.25																
$\Leftrightarrow m < 0 \vee m > 2$		0.25																

Câu 3: $9^x - 2.6^x + 4^x = 15^x - 10^x$ (1)	1đ
• (1) $\Leftrightarrow (3^x - 2^x)^2 = 5^x(3^x - 2^x)$	0.25
$\Leftrightarrow (3^x - 2^x = 0)$ (2) v $(3^x = 2^x + 5^x)$ (3)	0.25
• (2) $\Leftrightarrow \mathbf{x = 0}$.	0.25
• (3) $\Leftrightarrow \left(\frac{2}{3}\right)^x + \left(\frac{5}{3}\right)^x = 1$ • $\underline{x > 0}: VT = \left(\frac{2}{3}\right)^x + \left(\frac{5}{3}\right)^x > 1$ • $\underline{x < 0}: VT = \left(\frac{2}{3}\right)^x + \left(\frac{5}{3}\right)^x > 1$ • $\underline{x = 0}: VT = 2 > 1$ $\begin{matrix} >0 & & >1 & & >1 & & >0 \end{matrix}$ Vậy (3) vn.	0.25
Câu 4: $V_{S.OBC} = ?$	1đ
	
• $SA \perp mp(ABCD)$ nên $AC = hcSC/(ABCD) \Rightarrow \angle SCA = 60^\circ$	0.25
• $V_{S.OBC} = \frac{1}{3} dt(\triangle OBC).SA$	
• $\triangle SAC: SA = AC.tan60^\circ = 2a\sqrt{6}$	0.25
• $dt(\triangle OBC) = a^2$.	0.25
• $V_{S.OBC} = \frac{2a^3\sqrt{6}}{3}$.	0.25

HẾT