

ĐÁP ÁN**Phần 1****ÑÀI SỐÁTUYẾN TÍNH**

$$1.1 \quad \text{a) } X = \begin{pmatrix} 11 & 2 \\ 3 & 12 \end{pmatrix} \quad \text{b) } Y = \begin{pmatrix} -3 & 2 \\ 1 & 0 \end{pmatrix} \quad \text{c) } \begin{pmatrix} 13 & -4 \\ -1 & 6 \end{pmatrix}$$

$$\text{d) } \begin{pmatrix} 10 & 1 \\ 5 & 8 \end{pmatrix}; \begin{pmatrix} 9 & 2 \\ 3 & 9 \end{pmatrix}; \begin{pmatrix} 8 & 5 & -1 \\ 14 & 10 & -3 \end{pmatrix} \quad \text{e) } B, C, A, A^T \cdot B = \begin{pmatrix} 8 & 14 \\ 5 & 10 \\ -1 & -3 \end{pmatrix};$$

$$A^T C = \begin{pmatrix} 10 & 10 \\ 5 & 8 \\ 0 & -3 \end{pmatrix}; A^T A = \begin{pmatrix} 20 & 14 & -4 \\ 14 & 10 & -3 \\ -4 & -3 & 1 \end{pmatrix}. \quad \text{f) } x = 1; y = 2; z = 3$$

$$\text{g) } x = 6; y = -7; z = -3; t = 6. \quad \text{h) } M = \begin{pmatrix} 5 & -4 \\ -5 & 7 \end{pmatrix}, \text{ không có H.}$$

$$2.1 \quad \text{a) } \begin{pmatrix} 7 & -2 \\ -3 & 1 \end{pmatrix} \quad \text{b) } \begin{pmatrix} 4 & -3 \\ -1 & 1 \end{pmatrix} \quad \text{c) } \begin{pmatrix} -1 & 1 \\ 4 & -3 \end{pmatrix}$$

$$\text{d) } \begin{pmatrix} 1 & 2 & -2 \\ 0 & -1 & 1 \\ -2 & 1 & 0 \end{pmatrix} \quad \text{e) } \begin{pmatrix} 1 & -2 & 0 \\ 0 & 1 & -1 \\ -1 & 2 & 1 \end{pmatrix} \quad \text{f) } \begin{pmatrix} -2 & 1 & 0 \\ 0 & -1 & 1 \\ 1 & 2 & -2 \end{pmatrix}$$

$$2.2 \quad \text{a) } \begin{pmatrix} -9 & 2 \\ 5 & -1 \end{pmatrix} \quad \text{b) } \begin{pmatrix} 6 & 10 & -5 \\ -6 & -9 & 5 \\ -1 & -2 & 1 \end{pmatrix} \quad \text{c) } \begin{pmatrix} 8 & -24 & 7 \\ -2 & 7 & -2 \\ 1 & -3 & 1 \end{pmatrix}$$

$$3.1 \quad \text{a) } \begin{pmatrix} -2 & 1 \\ \frac{3}{2} & -\frac{1}{2} \end{pmatrix} \quad \text{b) } \text{Không có}$$

$$\text{c) } C^{-1} = \frac{1}{9} \begin{pmatrix} -13 & -15 & -5 \\ 6 & 9 & 3 \\ 2 & 3 & -2 \end{pmatrix} \quad \text{d) } G^{-1} = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 0 & -1 & 1 \end{pmatrix}$$

$$3.2 \quad \text{a) } 1 \quad \text{b) } -5 \quad \text{c) } -23 \quad \text{d) } 4 \quad \text{e) } 10 \quad \text{f) } -12$$

$$3.3 \quad \text{a) } \begin{pmatrix} 3 & -2 \\ 0 & 0 \\ 1 & 1 \end{pmatrix} \quad \text{b) } \begin{pmatrix} 10 & -5 \\ -5 & 5 \end{pmatrix} \det M = 25$$

c) $\begin{pmatrix} 1 & -1 \\ -3 & 4 \end{pmatrix}$ d) $\begin{pmatrix} 7 & 0 & 2 \\ -5 & -3 & 3 \end{pmatrix}$ $\begin{pmatrix} 5 & 0 & 0 \\ -17 & 0 & 1 \end{pmatrix}$

3.4 $X = \begin{pmatrix} 2 & -1 \\ -2 & 4 \\ 1 & -6 \end{pmatrix}$

3.5 $Z = \begin{pmatrix} -10 & -15 \\ -3 & -1 \end{pmatrix}$ $Y = \begin{pmatrix} 4 & -4 \\ -5 & 6 \end{pmatrix}$

3.6 a) B không khả nghịch $\forall s$ b) $t \neq 0$

4.1 a) Đúng cho cả 4 vector .
b) Vector d và vector e không phải, vector g phải.

4.2 a) Độc lập tuyến tính b) Phụ thuộc tuyến tính c) Phụ thuộc tuyến tính.

4.3 a) 2 b) 2 c) 3 d) 2

4.4 a) 2 b) 2 c) 2

4.5 a) Độc lập tuyến tính b) Phụ thuộc tuyến tính c) Độc lập tuyến tính.

4.6 a) Độc lập tuyến tính b) Độc lập tuyến tính c) Phụ thuộc tuyến tính
d) Phụ thuộc tuyến tính e) Độc lập tuyến tính .

5.1 a) 1 b) 2 c) 3 d) 2 e) 1 f) 2.

5.2 a) 2 b) 2 c) 2.

5.3 a/ $m=8$, $r(A)=2$,b/ $r(B)=3$ không phụ thuộc m.

8.1 a) $x =$, $y =$ b) $x = -4$, $y = 1$ c) (7 , -18) d) vô số nghiệm

8.2 a) $x_1 = 4$; $x_2 = -3$; $x_3 = 2$ b) $x_1 = 1+2t$; $x_2 = 2+3t$; $x_3 = t$.

c) (18; -5; 4) d) (2, 1, -1) e) Vô nghiệm f) Vô số nghiệm

8.3 a) $x = \frac{52}{83}$; $y = \frac{44}{83}$; $z = \frac{-48}{83}$ b) $x = 0$; $y = 2 - 4t$; $z = t$

c) $x = 3 - 2t$; $y = -2 + 2t$; $z = t$; $w = 0$. d) Vô nghiệm

e) $x = 100 + 96t - 3s$; $y = s$; $z = 54 + 52t$; $w = t$.

f) $x = 4 + 3t$; $y = 5 + 2t$; $z = t$. g) $x = -t$; $y = t$; $z = 0$.

8.4 a) $m \neq 0$ hệ vô nghiệm ; $m = 0$ hệ vô số nghiệm .

b) $m \neq 0, m \neq 1$ hệ có một nghiệm duy nhất ; $m = 0$ hệ vô nghiệm ; $m = 1$ hệ vô số nghiệm .

8.5 $M = \begin{pmatrix} 0,3 & 0,1 & 0,2 \\ 0,2 & 0,2 & 0,2 \\ 0,4 & 0,3 & 0,1 \end{pmatrix}$ $P = \begin{pmatrix} 35,33 \\ 27,56 \\ 34,89 \end{pmatrix}$

8.6 67.000 \$ sản phẩm Y và 81.000\$ sản phẩm Z .

Phần 2

GIẢI TÍCH

Chương I HÀM SỐ

1.1 a) $-2, -3, 22, a^2 - 3, (1 + a)^2 - 3$

b) $0, 5, \frac{1}{a^2} + \frac{2}{a} - 3, a + 2\sqrt{a} - 3.$

1.2 a) $x > 0$

b) $x > -5$

c) $x \geq 3$

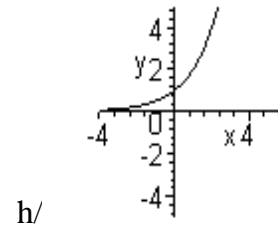
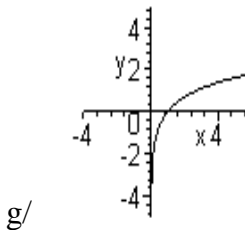
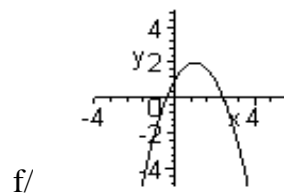
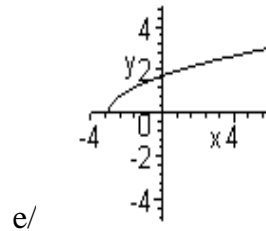
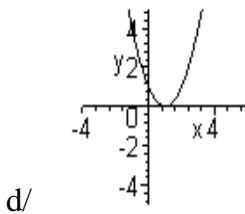
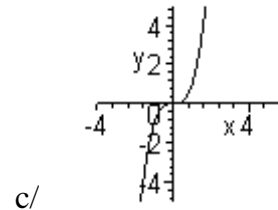
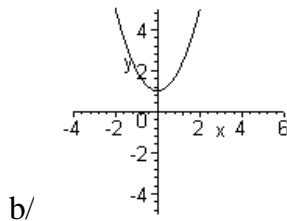
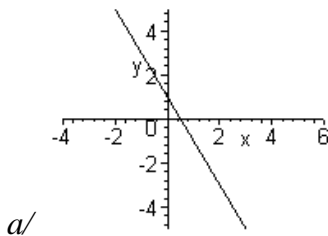
d) $\forall x$

e) $x \neq -2$

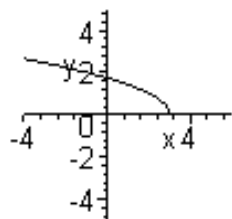
f) $x \leq -5$ hay $x \geq 1$

g) $\forall x$

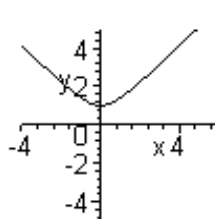
1.3 a/



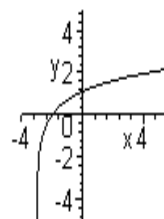
1.4



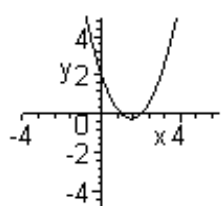
a/



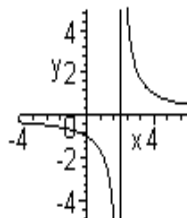
b/



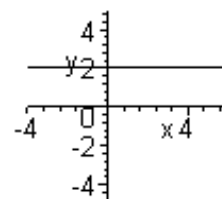
c/



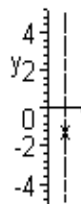
d/



e/



f/



g/

1.5 a/ sp b/ sp .

1.6 Nếu năng suất cao hơn 10 sp/ngày thì chọn Công ty B.

1.7a) $f[g(x)] = x^6 + x^3$; $g[f(x)] = (x^2 + x)^3$ b) $u[v(x)] = e^{\frac{x^2}{2x+1}}$; $v[u(x)] = \frac{e^{2x}}{2e^x + 1}$

4.1 a) 1 b) 10 c) ∞ d) ∞ e) ∞

4.2 a) $\frac{6}{20}$ b) ∞ c) ∞ d) 0

4.3 a) $-\frac{1}{2}$ b) $15/4$ c) $\frac{7}{2}$

4.4 Giá trị tại $x = -1, x = 1$.

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

4.6 a) $-\frac{1}{2}$ b) 6 c) -5,09

4.7 a) (1;2) b) (-6;-4)

5.1 a) $1/2$ b) $2(x+3)$ c) 4 d) $2x+3$ e) 3
f) $2(2x+1)$

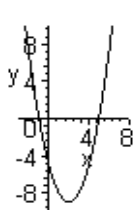
5.2 a) $6x^5$ b) 0 c) 0 e) $\frac{3}{4}x^{-\frac{1}{4}}$ f) $5^t \ln 5$ g) $\frac{1}{x \ln 4}$ h) $-\frac{1}{3}t^{-\frac{4}{3}}$

5.3 $\Delta y = -6, 6, 20$

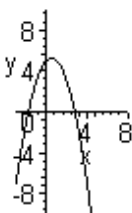
5.4 $\Delta y = 6, -2, -16$

- 5.5 a) $3x^2 + 3t^2$; $6xt$ b) $3s^2 + 3t$; $3s$.
- 6.1 a) $5x^4(x^2 - 2x + 1) + (x^5 + 1)(2x - 2)$ b) $3x^2(1 - \sqrt{x}) - \frac{x^3 - 2}{2\sqrt{x}}$
 c) $5x^4(x-1)^2 + 2(x^5 + a)(x-1)$ d) $\frac{2}{\sqrt{x}}(x^3 - 4x) + (4\sqrt{x} - 1)(3x^2 - 4)$
 e) $\frac{2x}{1-x^4} + \frac{4x^3(x^2 - 1)}{(1-x^4)^2}$ f) $\frac{-3}{(x-1)^4}$ g) $\frac{2^x \ln 2}{1-x} + \frac{2^x}{(1-x)^2}$
- 6.2 a) $\frac{3t^2}{\sqrt{t-5}} - \frac{t^{5/2}}{2(\sqrt{t-5})^2}$ b) $\frac{\cos v}{v^2 - 1} - \frac{2v \sin v}{(v^2 - 1)^2}$ c) $f'_x = 2t\left(\frac{-1}{(1+x)^2}\right) + 7x^6$
 d) $3ax^2 + 2bx + c$ e) $\frac{a}{cx+d} - \frac{(ax+b)c}{(cx+d)^2}$
- 6.3 a) $\frac{1}{3} \cdot \frac{2x + \cos x}{(x^2 + \cos x)^{2/3}}$ b) $10(2x+2)(x^2 + 2x+1)^9$ c) $-\frac{10x}{(x^2 + 1)^6}$
 d) $-5(3x+5)^6 - 90x(3x+5)^5$ e) $15x^2(1+x^3)^4 - 21x^2(1+x^3)^6$
 f) $8(x-4)^7(x+3)^9 + 9(x-4)^8(x+3)^8$ g) $\frac{-90}{(2x+1)^4}$ h) $\frac{3x^2 + 3}{x^3 + 3x + 3}$
 i) $7a(ax+b)^6$ l) $e^{x^3+4}(1+3x^2)$ m) $\frac{-2x}{\ln^2(x^2 + 4) \cdot (x^2 + 4)}$
- 7.1 a) 2824,752 b) 9,05538 c) 3,03658
- 7.2 a) 9,6 b) - 62500
- 7.3 a) 1/4 b) - 6 c) 1 d) ∞ e) 0
- 8.1 a) $E(p) = \frac{(50 - 50p)p}{63000 + 50p - 25p^2}$ b) - 1,036 và -3,12.
- 8.2 $E(p) = -\frac{2p}{p+4}$, -1,2 và -1,5 .
- 8.3 -2,2 và -1,6.
- 8.4 a) $\frac{1500x^2}{\sqrt{x^3 + 2}}$ b) $\frac{2000x}{\sqrt{x^2 + 3}}$.
- 9.1 a) $y_{\min} = -9$ b) $y_{\max} = \frac{21}{4}$ c) $y_{\min} = -2$ d) $y_{\min} = 1, y_{\max} = \frac{59}{27}$
 e) $y_{\max} = 8 ; y_{\min} = 4$ f) $y_{\min} = 0; y_{\max} = 1$ g) $y_{\max} = \frac{27}{256} = f(3/4)$
 h) $y_{\min} = -13$ i) $y_{\max} = 3$ k) $y_{\min} = -8$ l) Không có.

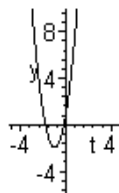
9.2



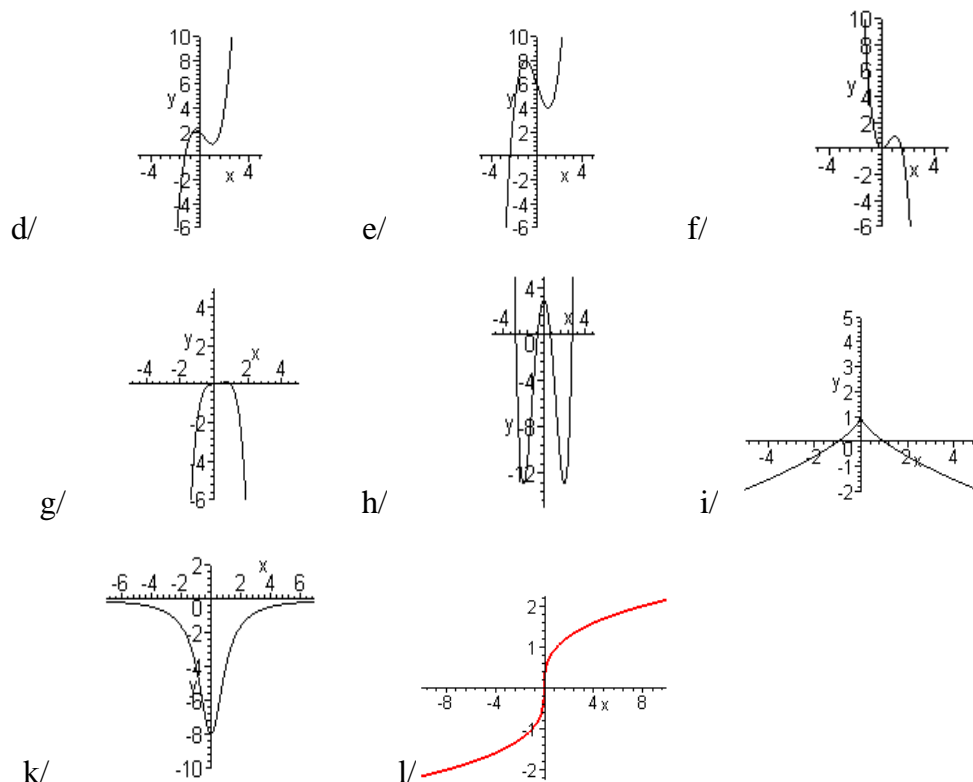
a/



b/



c/



- 9.3 a) $y_{\min} = 0, y_{\max} = 5, y_{\min} = -27$ b) $y_{\min} = 0$ c) $y_{\min} = -9, y_{\max} = 0$
 d) $y_{\min} = -\frac{1}{2}, y_{\max} = \frac{1}{2}$ e) $y_{\max} = 3$ f) $y_{\min} = -2, y_{\max} = 2.$
- 9.4 14m .
- 9.5 450 sản phẩm.
- 9.6 10 cm.
- 9.7 a) $R(x) = x(150 - 0,5x)$ b) $P(x) = x(150 - 0,5x) - (4000 + 0,25x^2)$; 100 sản phẩm
- 9.8 a) $x = 0$ cm và $y = 24$ cm b) 13,44 cm và 10,56 cm.
- 9.9 3km từ A ,2km từ B

Chương II **TÍCH PHÂN**

- 1.2 a) $\frac{6}{7}x^{7/3} + \frac{3}{2}x^2 - x + 6$ b) $\frac{3}{5}x^{5/3} + C$ c) $-\frac{1}{3x^3} + C$
 d) $x^2 + 2\sqrt{x} + C$ e) $\frac{3}{4}u^4 + \frac{1}{2}u^2 + C$ g) $2x^3 - \frac{11}{2}x^2 + 5x + C$
 h) $\frac{2}{7}y^{7/2} + C .$

- 1.3 a) $C = 85x + 5500$ b) $C = \frac{x^2}{100} + 10x + 1000$.
- 1.4 a) $\frac{x^7}{7} + C$ b) $2x + C$ c) $\frac{4}{5}x^{5/4} + C$ d) $\frac{1}{3}x^3 + \frac{x^2}{2} - x + C$
- e) $\frac{t^3}{3} - t^2 + 3t + C$ f) $\frac{5}{8}e^{8x} + C$ g) $1000\ln x + C$ h) $-18x^{1/3} + C$
- i) $-4e^{-2x} + C$ k) $-\frac{2}{5}t^{5/2} + \frac{2}{3}t^{3/2} + C$ l) $\frac{\ln/x/}{\ln 10} + C$ m) $\frac{x^2}{2} - x + C$
- 2.1 a) $\frac{1}{5}(x-2)^5 + C$ b) $\frac{2}{9-t} + C$ c) $\frac{2}{3}(1+x)^{3/2} + C$ d) $\ln(3x^2 + x)^2 + C$
- e) $-\frac{1}{10(5x+1)^2} + C$ f) $2(x+1)^{1/2} + C$ g) $-\frac{1}{3}\ln|1-e^{3x}| + C$
- h) $\frac{1}{2}x^2 + x + \ln|x-1| + C$ i) $\frac{1}{3}(x^2+4)^{3/2} + C$.
- 2.2 a) $\frac{1}{5}e^{5x} + C$ b) $\frac{-1}{2(x+1)^2} + \frac{1}{3(x+1)^3} + C$ c) $\frac{1}{9}\left(\ln|3x-1| - \frac{1}{3x-1}\right) + C$
- d) $2(\sqrt{t}-1) + 2\ln|\sqrt{t}-1| + C$ e) $4\sqrt{t} + \ln t + C$ g) $\frac{1}{3}xe^{3x} - \frac{1}{9}e^{3x} + C$
- h) $-x^2e^{-x} - 2xe^{-x} - 2e^{-x} + C$ i) $x\ln 2x - x + C$ j) $\frac{1}{2}e^{x^2} + C$
- 3.1 a) $\frac{1}{2}\ln\left|\frac{x-1}{x+1}\right| + C$ b) $\frac{1}{4}\ln|4x+1| - \frac{1}{4}\ln|4-x| + C$ c) $-\ln|x| + \ln|3x-1| + C$
- d) $\ln|x-1| - \ln|x+2| + C$ e) $\frac{3}{2}\ln|2x-1| - 2\ln|x+1| + C$ g) $-3\ln|x-1| - \frac{1}{x-1} + C$
- h) $\ln|x| + 2\ln|x+1| + \frac{1}{x+1} + C$.
- 3.2 a) 2504 \$ b) 5002 \$
- 3.3 a) $N(t) = \frac{500}{1 + \frac{247}{3}e^{(-500)(0.00384)t}}$ b) 500 người c) 11 giờ 25 ph
- 4.1 a) $\frac{35}{2}$ b) 0 c) $1/3$ d) -4 e) $-\frac{27}{20}$
- f) 2 g) $\frac{1}{2}(1-e^{-2}) \approx 0,432$ h) 4
- i) $\frac{1}{2}(\ln 5 - \ln 8) \approx -0,235$ j) $2\ln(2+e^3) - 2\ln 3 \approx 3,993$.
- 4.2 a) $R(t) = 0,81t^2 - 21,14e^{-t} + 66,24$ b) 85,76 (tỷ \$).
- 4.3 a) 36 b) 9 c) $\frac{3}{2}$ d) $e-2$ e) $\frac{4}{3}$ f) 1,095 g) $\frac{5}{6}$.
- 4.4 a) 0,746 b) 10,74
- 5.1 a) $\ln|7+x^3| + C$ b) $\frac{1}{3}e^{3x} + C$ c) $\frac{1}{4}e^{x^4} + C$ d) $\frac{\ln^2 4x}{2} + C$
- e) $-\ln|4-x| + C$ f) $\frac{1}{8}(x^4+x^3+x^2)^8 + C$ g) $\ln(4+e^x) + C$ h) e^{-1} i) $\ln 19$
- 5.2 a) $-\frac{x}{2}e^{-2x} - \frac{1}{4}e^{-2x} + C$ b) $\frac{x^3}{3}\ln x - \frac{x^3}{9} + C$ c) $\frac{x^2}{2}\ln x^2 - \frac{x^2}{2} + C$

d) $(x+3) \ln(x+3) - x + C$ e) $\left(\frac{x^2}{2} - x\right) \ln x - \frac{x^2}{4} - 2x + C$ f) $\frac{2}{3}x(x+2)^{3/2} - \frac{4}{15}(x+2)^{5/2} + C$

g) $\frac{1}{2}x^2e^{2x} + \frac{1}{4}e^{2x} - \frac{1}{2}xe^{2x} + C$ h) $\frac{8}{3}\ln 2 - \frac{7}{9}$ i) $9\ln 9 - 5\ln 5 - 4$

6.1 a) 1 b) 1 c) Phân kỳ d) Phân kỳ e) 4 f) 6 g) 6

h) $\ln(4 + \sqrt{7}) - \ln 3 \approx 0,79$ i) $2\sqrt{2}$ k) -1 l) Phân kỳ m) Phân kỳ

Chương III **HÀM NHIỀU BIẾN**

2.1 a) 4 và -6 ; b) 1 và $-13\frac{8}{9}$; c) 6 và 12 .

2.2 a) $2 - 3y$; $-3x$; -7 và 0 b) $6x - 2y$; $-2x + 1$; -6 và 1 .

2.3 a) $2-3y$; $-3x$ b) $6x-2y$; $-2x+1$ c) $\frac{5}{2\sqrt{x}}$; $-12y$ d) $\frac{1}{y}$; $-\frac{x}{y^2}$

e) $2xe^{2y}$; $2x^2e^{2y}$ g) $-2xe^{-(x^2+y^2)}$; $-2ye^{-(x^2+y^2)}$

2.4 a) $\frac{x}{\sqrt{x^2+y^2}}$; $\frac{y}{\sqrt{x^2+y^2}}$ b) $2e^{2x+3y}$; $3e^{2x+3y}$

c) $y.e^{xy}$; $x.e^{xy}$ d) $\frac{y}{x+y}$; $\frac{y}{x+y} + \ln(x+y)$

e) $\frac{1}{y} + \frac{y}{x^2}$; $-\frac{x}{y^2} - \frac{1}{x}$ f) $12(2x+y-5)$; $6(2x+y-5)$.

3.1 a) 0 ; 0 ; 0 b) $\frac{-5}{4x^{3/2}}$; -12 ; 0

c) $\frac{-x^2}{(x^2+y^2)^{3/2}} + \frac{1}{\sqrt{x^2+y^2}}$; $\frac{-y^2}{(x^2+y^2)^{3/2}} + \frac{1}{\sqrt{x^2+y^2}}$; $\frac{-xy}{(x^2+y^2)^{3/2}}$

d) 6 ; -1 ; 0 e) $20x^3 + 6xy^2$; $24x^4y^3 + 6x^2y$; $12x^5y^2 + 2x^3$ f) 0 ; 0 ; e^y

3.2 a) Cực tiểu tại $\left(-\frac{1}{3}; \frac{2}{3}\right)$ b) Cực tiểu tại (1 ; 1) c) Không có

d) $\min = f(0;0) = 0$ e) $\min = f\left(\frac{1}{2}; -\frac{1}{4}\right) = -\frac{1}{2}$ g) Không có.

3.5 Bóng chuyền 2.000 , bóng đá 3.000 .

3.6 $p_1 = 37/3$; $p_2 = 35/3$.

3.7 a) $\Delta z = 0,5805$; $dz = 0,58$

4.1 a) $f(2;4) = 8$ max b) $f(2;4) = -16$ max

c) $f(4;2) = 20$ min d) $\min = -2$, $\max = 2$.

4.2 Tại A: 10.000 , tại B :100.

4.3 Tại A :160 , tại B :340 .

4.4 a) $\text{Max} = f(2,2) = f(-2,-2) = 16$; $\text{min} = f(-2,2) = f(2,-2) = -16$

b) $\text{Max} = f(1,1) = e$; $\text{min} = f(-1,1) = -e$

c) $\text{Max} = f(\pm\sqrt{2}, 1) = 2e$; $\text{min} = f(0, \pm\sqrt{3}) = 0$

d) $\text{Max} = f(\pm\sqrt{2}, 1) = +8$; $\text{min} = f(\pm\sqrt{2}, -1) = -8$.

4.5 $x = 400.000 \$$, $y = 200.000 \$$.

4.6 $x = 94$, $y = 156$.

Chương IV PHƯƠNG TRÌNH VI PHÂN

1.1 a) $y = x^4 + C$ b) $y = \frac{1}{2}e^{2x} + \frac{1}{2}x^2 + C$ c) $y = 3\ln x - \frac{1}{3}x^3 + \frac{1}{6}x^6 + C$

1.2 a) $y = \frac{1}{3}x^3 + x^2 - 3x + 4$ b) $y = x^3 - \frac{x^2}{2} + 8x + 6$ c) $y = \frac{3}{5}x^{\frac{5}{3}} - \frac{1}{2}x^2 - \frac{61}{10}$

d) $y = x^2 + x + 3$ e) $y = \frac{1}{3}\left(2x^{\frac{3}{2}} - 16\right)$ g) $y = 2\sqrt{x+2} - 5$.

3.1 a) $y = C_1e^{-x^4}$ b) $y = \sqrt[3]{\frac{5}{2}t^2 + C}$ c) $y = \sqrt{2x^2 + C}$ và $y = -\sqrt{2x^2 + C}$

d) $R = \sqrt{6t+C}$ và $R = -\sqrt{6t+C}$ e) $y = -3 + 8e^{\frac{x^2}{2}}$ f) $y = \sqrt[3]{15x-3}$

3.2 a) $y = Ce^{x^2} - 1$ b) $y = \frac{1}{4}e^{2x} + Ce^{-2x}$ c) $y = \frac{1}{2}x^5 + Cx^3$

d) $y = \frac{e^x}{x} - \frac{1}{2}x + \frac{C}{x}$ e) $y = e^{-3x}\left(\frac{1}{3}x + \frac{C}{x^2}\right)$ f) $y = \frac{x^3}{4} + \frac{6}{x}$

g) $y = \frac{2x^2 + x^4 + 4C}{4(1+x^2)}$.

4.1 a) $y = C_1e^{-2x} + C_2xe^{-2x}$ b) $y = C_1e^{5x} + C_2e^{2x} + \frac{1}{2}$ c) $y = 14e^{2x} - 8e^{3x} + 1$

d) $y = 5e^{-x} + 3e^{2x} - 4$ e) $y = C_1e^{-5x} + C_2xe^{-5x}$

**. Nếu phát hiện sai sót gì xin vui lòng báo lại tác giả thachnq@yahoo.com.
Xin cảm ơn.*