2020年3月18日 计算题卡Vreview1.20200318　用时_____ 得分_____

a的1/8为9，求a的值a=_____

$$14^2= \quad 18^2= \quad 45^2= \quad 84\times 86= \quad \frac{6}{7}=$$

$$\frac{1}{6}= \quad \frac{2}{3}= \quad \frac{6}{7}= \quad \frac{5}{8}= \quad \frac{6}{8}= \quad e=lim \quad = \quad \pi=$$

$$2^4= \quad 2^{10}= \quad 14=\underline{\quad}_{(2)} \quad 139=0x\underline{\quad}$$

$$educt\ derivatives: \quad f(x)=\sqrt{x}, \quad g(x)=\frac{1}{x}, \quad h(x)=x^a, a\in N^+$$

$$find\ partial\ derivatives, gradient: \quad f(x)=-6x^2+8xy+\frac{2}{7}y^2-3x-3$$

$$find\ derivatives: \quad g(x)=\sqrt{8x^3} \qquad h(x)=\frac{8x^3}{2x^7}$$

$$(\sqrt{-5x^2-3x+4})' \quad (3^{2x^2+2x-3})' \quad [\ln(3x^2+e^{7x})]'$$

$$(\frac{1}{9x^2+4x+2})' \quad (e^{\sqrt{2x^3}})' \quad (e^{\frac{2x^4}{2x^9}})' \quad (\sqrt{log_2x+9lgx-lnx})'$$

There are 1 red balls ,9 blue balls in A box; There are 4 red balls ,6 blue balls in B box; If you take a red ball at random ,what is the probability you take it from box A?

$$given\ 9,3 \quad find\ means:$$

$$A_{-\infty}= \quad A_{-1}= \quad A_0= \quad A_1= \quad A_2= \quad A_{+\infty}=$$

$$first\ 1\ miles\ speed\ is\ 9\ m/s; second\ 3\ miles\ speed\ is\ 4\ m/s;$$

$$find\ the\ mean\ speed:$$

画图，化为函数，指出梯度，倾斜角，截距，法向量，原点到直线距离,点(6,8)到直线距离

$$-7x + 7y = 4$$

draw plane in cube,and draw the contours on both 3d and 2d images.

$$L(x, y) = -3x + y$$

$\lg 5 - \lg 3 =$ $8 \ln 2 =$ $3^8 \times 3^{-2}$ $\frac{8^3}{8^9} =$

$(2^8)^{\frac{1}{4}} =$ $\log_{\frac{1}{125}} 5 =$ $(\frac{1}{9})^{-\frac{1}{2}} =$

sort in ascending order : x x^2 $\ln x$ 2^x $x \lg x$ $x!$ $\sqrt{x}$

orig\mirror	x axis	y axis	original point	y = x	grap
(-1,-1)					
y=5x-2					
$y = x^5$					
$y = \log_2 x$					

$\log_{27} 3^6 =$ $4^{log_4 5} =$ $\log_3 6 = \frac{1}{\quad}$ $\log_7 9 = \frac{ln}{ln}$

$(3^6)^{\frac{1}{2}} =$ $\log_{\frac{1}{64}} 4 =$ $(\frac{1}{125})^{-\frac{1}{3}} =$

$$use\ lg\ table : \sqrt{2806112^9} =$$

$$use\ lg\ graph : 2672500 \times 274632 =$$

$+ \quad = 1$ $tan\alpha =$ $sin\beta =$ $cos\gamma =$

$$\triangle ABC :\ C = 90^\circ : cosB = \frac{5}{13}, a = 40,\ the\ other\ sides\ length?$$

$(img) sin\theta =$ $cos\theta =$ $tan\theta =$ $csc\theta =$ $sec\theta =$ $cot\theta =$

Degrees	0°	30°	45°	60°	90°	120°	135°	150°	180°	1.000°	
Radians											1.000
cos										–	–
tan										–	–
sin										–	–

Pythagorean triple: (3, ,)(5, ,)(8, ,)

$$given\ P_1(-8,-6,8), P_2(9,-7,1), find\ distances:$$

$d_{Euclidean} =$ $d_{Manhattan} =$ $d_{Chebyshev} =$

$$given\ P_1(4,4,9), P_2(8,-6,-7), find\ Minkowski\ distances:$$

$d_{(-\infty)} =$ $d_{(-1)} =$ $d_{(0)} =$ $d_{(1)} =$ $d_{(2)} =$ $d_{(+\infty)} =$

$$given\ P_1(a,c,c,c,e), P_2(b,b,e,a,e), find\ distances:$$

$d_{Hamming} =$ $d_{Jaccard} =$

$$given\ Y = (a,b,b,c,c,a,b,c,b,c):$$

$$Gene(Y) =$$

$find\ norms:\ P_1(-3,-1,-1), P_2(-7,-5,8),\quad dP = P1 - P2 =$

$\|dP\|_{-\infty} =$ $\|dP\|_0 =$ $\|dP\|_1 =$ $\|dP\|_2 =$ $\|dP\|_{+\infty} =$

scaling data:

X	Decimal	Min-Max	Z-score	MaxAbs	RobustScale
2					
4					
5					
6					
2					

Median(X)=	
IQR(X)=	
Mean(X)=	
standard deviation(x)=	

Actual Y	A	B	A	B	B	B	B	A	B	B
Predicted Y	A	B	A	B	A	A	B	A	A	B

Confused Matrix

	Actual A	Actual B
Predicted A		
Predicted B		

Accuracy Rate _____

	Precision	Recall	F1 Score	Support
A				
B				
avg/total				

Simplify $Y = \sum (m0\ m2\ m5\ ) =$ _____

Karnaugh Map to Binary

A\BC	00	01	11	10
0				
1				

$$\begin{bmatrix} 5 & 6 \\ 6 & 9 \end{bmatrix} \times \begin{bmatrix} 8 & -3 \\ -2 & -6 \end{bmatrix} =$$

find solution by Substitution,Elimination,Lines Graph,Argument Matrix,Gaussian Elimination,Companion Matrix,Cramers Rule,: $\begin{cases} 2a - 1b = 23 \\ -1a - 3b = 6 \end{cases}$