2020年3月20日 计算题卡Vreview1.20200320　用时_____ 得分_____

a的1/7为7，求a的值a=_____

$$11^2 = \quad 19^2 = \quad 25^2 = \quad 62 \times 68 = \quad \frac{5}{7} =$$

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

$$2^4 = \quad 2^{10} = \quad 13 = \_\_\_\_{(2)} \quad 204 = 0x\_\_\_\_$$

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

$$find\ partial\ derivatives, gradient: \quad f(x) = -7x^2 + 4xy + \frac{3}{9}y^2 + 9x + 1$$

$$find\ derivatives: \quad g(x) = \sqrt{4x^9} \qquad h(x) = \frac{4x^1}{3x^9}$$

$$(\sqrt{-8x^2 + 1x - 1})' \quad (3^{4x^2-7x+1})' \quad [\ln(2x^2 + e^{5x})]'$$

$$(\frac{1}{8x^2 - 1x - 7})' \quad (e^{\sqrt{7x^1}})' \quad (e^{\frac{7x^1}{4x^8}})' \quad (\sqrt{log_4 x + 6lgx - lnx})'$$

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

$$given\ 7, 2 \quad find\ means:$$

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

$$first\ 5\ miles\ speed\ is\ 5\ m/s; second\ 6\ miles\ speed\ is\ 3\ m/s;$$

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

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(7,6)到直线距离

$$1x - 2y = -1$$

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

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

$\lg 5 - \lg 3 =$ $2 \ln 9 =$ $3^2 \times 3^{-9}$ $\frac{3^2}{3^6} =$

$(3^8)^{\frac{1}{5}} =$ $\log_{\frac{1}{25}} 5 =$ $(\frac{1}{27})^{-\frac{1}{3}} =$

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

orig\mirror	x axis	y axis	original point	y = x	grap
(6,9)					
y=5x-2					
$y = x^5$					
$y = \log_2 x$					

$\log_9 3^9 =$ $5^{log_5 5} =$ $\log_3 9 = \frac{1}{\quad}$ $\log_2 3 = \frac{ln}{ln}$

$(2^9)^{\frac{1}{3}} =$ $\log_{\frac{1}{125}} 5 =$ $(\frac{1}{25})^{-\frac{1}{2}} =$

$$use\ lg\ table : \sqrt{2715627^9} =$$

$$use\ lg\ graph : 8788377 \times 690824 =$$

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

$$\triangle ABC :\ C = 90^\circ : cosB = \frac{15}{17}, c = 119,\ the\ other\ sides\ length?$$

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

Degrees	0°	30°	45°	60°	90°	120°	135°	150°	180°	1.000°	
Radians											1.000
cot										–	–
csc										–	–
cos										–	–

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

$$given\ P_1(-2,-6,3), P_2(2,1,-1), find\ distances:$$

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

$$given\ P_1(-9,5,-3), P_2(-6,3,0), find\ Minkowski\ distances:$$

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

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

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

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

$$Gene(Y) =$$

$find\ norms:\ P_1(-6,7,7), P_2(1,-7,8), \quad dP = P1 - P2 =$

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

scaling data:

X	Decimal	Min-Max	Z-score	MaxAbs	RobustScale
-9					
4					
-1					
-3					
-3					

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

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

Confused Matrix

	Actual A	Actual B
Predicted A		
Predicted B		

Accuracy Rate _____

	Precision	Recall	F1 Score	Support
A				
B				
avg/total				

Simplify $Y = \sum (m6\ m7\ ) =$ _____

Karnaugh Map to Binary

A\BC	00	01	11	10
0				
1				

$$\begin{bmatrix} 0 & 4 \\ 8 & 0 \end{bmatrix} \times \begin{bmatrix} -7 & -1 \\ -6 & -4 \end{bmatrix} =$$

find solution by Substitution,Elimination,Lines Graph,Augmented Matrix,Gaussian Elimination,Companion Matrix,Cramers Rule,Formula,: $\begin{cases} 5r - 9s = -60 \\ 7r - 4s = -41 \end{cases}$