

E EC  $\hat{R}$  E CE A  $\hat{R}$  A C A | DFFE  $\hat{R}$  E A E E A C

f... (6) - b... b-  
+... (l b... b... f...  
y)... ny... b... b... +...  
b... f... by... b... y...  
f... f... (Z... 6)  
b... b... y... l b...  
y... f... f... (99  
Z... 6) y... b... +...  
y... b... b... f... (l...  
f... y... y... f...  
+... b... l b... (l...  
Z... 6)  
b... f... b... ( )  
y... f... f... f... f...  
f... ( )  
y... (Z... )  
+... b... b... b... +...  
y... ff... f... by...  
y... b... bj... l b... -  
ny... y... " ... y...  
b... bj... l b... ny...  
y... ff... f... f...  
b... f... f... by... b...  
y... b... b...  
y... ff... f... f...  
b... y... y...  
f... y... f... f...  
y... y... y... y...  
y... by...  
-f... y... (-) y...  
y... y... y...  
f... f... y...  
b... y... ( )  
l... ) y...

(... 5 8  
) (... 8)  
y... ( )  
f y )  
ff... ff... b...  
y...  
f... b... ff... y...  
(... 5 8  
) f... f...  
f... b... f... f... f...  
(... 6)  
f... f... (8)  
f... (8)  
by...  
f...  
y... (l...  
)  
y... Z... y...  
Z... ), b... -  
ff... b...  
f... y... fy...  
y... y... b... f...  
f... f...  
y... (Z... )  
f... y... (8) b...  
ny...  
y... y... f... y...  
f... b...  
f... y... (Z... )  
ff... by... y... b... -  
b... (l...  
6... ) b...  
f... ff... (l... )  
( ) f... f...  
y... y...  
y... ff... f... f...  
(Z... )

... ny, ... fl  
I - \sqrt{+} I - \sqrt{-}  
... 6. ... fl  
... yb ... f  
... ny ... yb b( I + \sqrt{-}  
... f ... ny-  
... yb b( I - \sqrt{+} ) ... f  
... ny ... yb b( I - \sqrt{+} -  
... ) ... f ... ny ... yb b  
... I + \sqrt{-} ) ... f  
... b f f  
... f ... y  
... 8 fl  
... b ... bj  
... ny  
... busy  
... f  
... f  
... y  
... b ... y ... f  
... b ... b ... j ... f  
... f ... by  
... b ... f ... I + \sqrt{+}  
... I + \sqrt{-}  
... f  
... busy  
... f  
... f  
... ny  
... b ... f  
... y ... b-  
... b ... y ... b-

... fl ... f y ...  
...

**D E**                      **E**

... yb ... b -  
... f ... ( )  
... b ) ... b + ...  
... ( I + \sqrt{+} ) ... b -  
... + ... ( I + \sqrt{-} ) ...  
... b + ... ( I - \sqrt{+} ) ...  
... ny ... b ... ( )  
... I - \sqrt{-} ) ... bj  
... ( ) b ( ) bj ( ) b ( )  
... bj ( ) ...  
... (+ + ) (+ - ) ... bj f ... by b  
... bj f ... b ... ( )  
... b ... by  
... bj f ... ( ) by bj f  
... b ( )  
... f ... b  
... yb ( 种植 )  
... yb ( 种植 ) f  
... f ... y -  
... y  
... b ny  
... yb f ... yb ... yb f  
... b f  
... f ...  
... b y f  
... ny b ... yb ... b  
... f ... y-  
... b b  
... y f ... y ... ( ... yb  
... b  
... y ... f  
... y b ... y ... b  
... b ... yb  
... f ... b ( 蒜 ) f  
... I + \sqrt{+} I + \sqrt{-}  
... yb ... b ... f b

$\int_{-\infty}^{\infty} f(x) \delta(x-b) dx = f(b)$

EE

Consider the function  $f(x)$  defined by  $f(x) = 6$  for  $x < 0$  and  $f(x) = -x$  for  $x > 0$ . The function  $f(x)$  is continuous at  $x=0$  since  $\lim_{x \rightarrow 0^-} f(x) = 6 = f(0) = \lim_{x \rightarrow 0^+} f(x) = 0$ . The function  $f(x)$  is differentiable at  $x=0$  since  $\lim_{x \rightarrow 0^-} \frac{f(x)-f(0)}{x-0} = \lim_{x \rightarrow 0^-} \frac{6-6}{x-0} = 0 = \lim_{x \rightarrow 0^+} \frac{f(x)-f(0)}{x-0} = \lim_{x \rightarrow 0^+} \frac{-x-0}{x-0} = -1$ . The function  $f(x)$  is not differentiable at  $x=0$  since the left and right derivatives are not equal.

EE

Consider the function  $f(x)$  defined by  $f(x) = \sin(x)$  for  $x < \pi$  and  $f(x) = \cos(x)$  for  $x > \pi$ . The function  $f(x)$  is continuous at  $x=\pi$  since  $\lim_{x \rightarrow \pi^-} f(x) = \sin(\pi) = 0 = f(\pi) = \lim_{x \rightarrow \pi^+} f(x) = \cos(\pi) = -1$ . The function  $f(x)$  is not differentiable at  $x=\pi$  since  $\lim_{x \rightarrow \pi^-} \frac{f(x)-f(\pi)}{x-\pi} = \lim_{x \rightarrow \pi^-} \frac{\sin(x)-0}{x-\pi} = 1$  and  $\lim_{x \rightarrow \pi^+} \frac{f(x)-f(\pi)}{x-\pi} = \lim_{x \rightarrow \pi^+} \frac{\cos(x)-(-1)}{x-\pi} = -1$ .

1. (a)  $\frac{1}{2}$  (b)  $\frac{1}{2}$  (c)  $\frac{1}{2}$  (d)  $\frac{1}{2}$  (e)  $\frac{1}{2}$  (f)  $\frac{1}{2}$  (g)  $\frac{1}{2}$  (h)  $\frac{1}{2}$  (i)  $\frac{1}{2}$  (j)  $\frac{1}{2}$  (k)  $\frac{1}{2}$  (l)  $\frac{1}{2}$  (m)  $\frac{1}{2}$  (n)  $\frac{1}{2}$  (o)  $\frac{1}{2}$  (p)  $\frac{1}{2}$  (q)  $\frac{1}{2}$  (r)  $\frac{1}{2}$  (s)  $\frac{1}{2}$  (t)  $\frac{1}{2}$  (u)  $\frac{1}{2}$  (v)  $\frac{1}{2}$  (w)  $\frac{1}{2}$  (x)  $\frac{1}{2}$  (y)  $\frac{1}{2}$  (z)  $\frac{1}{2}$

5.  $\gamma = \sqrt{16} = 4$

		$\gamma = 4$	
		F	P
$\sqrt{16} = 4$	$I \times I$	886	9
$\sqrt{16} = 4$	$I \times \gamma$		6
	$\gamma \times \gamma$		9
	$I \times \gamma$	8 <sup>8</sup>	9
	$\gamma \times \gamma$	8 <sup>9</sup>	8

$\gamma = \sqrt{16} = 4$

$I \times I$

$I \times \gamma$

$\gamma \times \gamma$

$I \times \gamma$

$\gamma \times \gamma$

$F(8, 9) = 8 \quad P = 69$

$(P > )$

$\gamma = \sqrt{16} = 4$

$I \times I$

$I \times \gamma$

$\gamma \times \gamma$

$I \times \gamma$

$\gamma \times \gamma$

$F(8, 9) = 8 \quad P = 69$

$(P > )$

$\gamma = \sqrt{16} = 4$

$I \times I$

$I \times \gamma$

$\gamma \times \gamma$

$I \times \gamma$

$\gamma \times \gamma$

$F(8, 9) = 8 \quad P = 69$

$(P > )$

$\gamma = \sqrt{16} = 4$

$I \times I$

$I \times \gamma$

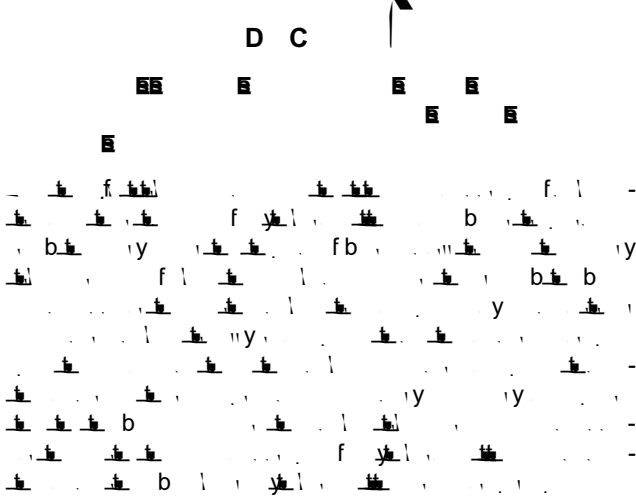
$\gamma \times \gamma$

$I \times \gamma$

$\gamma \times \gamma$

$F(8, 9) = 8 \quad P = 69$

$(P > )$



... f... b...  
y... b...  
... y... b...







f y b f b l y l y  
y  
b l y f y b  
b

c | c |

y y by  
Z ( ) y  
f f l y  
f y b y  
b  
b f l y  
b y  
f l y b  
b l y f  
ff  
f f l f l

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### REFERENCE

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