Advanced Engineering Mathematics, by Erwin Kreyszig 10th. Ed.

**Problem Set 6.1**

No. 1



ℒ

No. 2

求ℒ{f(t)}



ℒ

No. 3

 求ℒ{f(t)}

ℒ

No. 4

 求ℒ{f(t)}



ℒℒℒℒ



No. 5

 求ℒ{f(t)}



ℒ

No. 6

 求ℒ{f(t)}



ℒ

No. 7

 求ℒ{f(t)}



ℒℒℒ



No. 8

 求ℒ{f(t)}



ℒ

No. 9



No. 10



ℒ

No. 11



ℒ



No. 12



ℒ





No.13



ℒ



No. 14



ℒ

No.15



ℒ 



ℒ



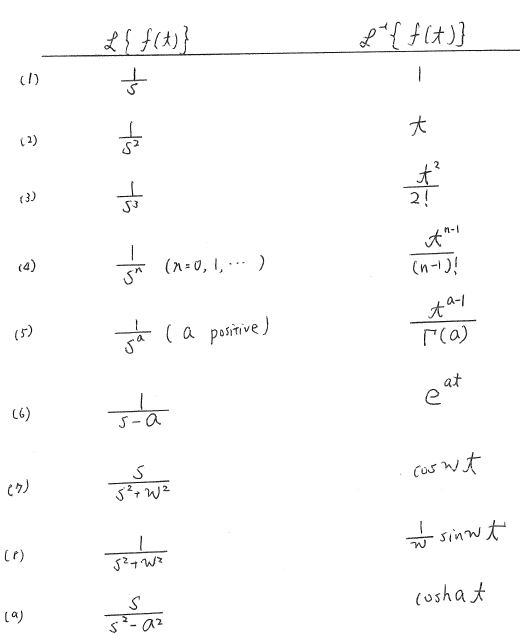


No. 16



ℒ

No. 17





No. 18

In Problem 10



ℒ 

If , ℒ

又ℒ 

ℒ

No. 19



And ℒ ℒ

ℒℒ ℒ

No. 20

and . Nocan satisfy for t larger

than a certain value.

No. 21

If a function and,  i.e. then nocan satisfy for t larger than a certain value. has no Laplace transform.

No. 22

Since 

Set  then 

ℒ

Remark:   cannot be met.

No. 23

 ℒ

And ℒ Set 



ℒ

Since ℒ ℒ

No. 24

ℒaℒ＋b ℒ＝

ℒ－1ℒℒ－1

ℒ－1 Or aℒ－1{F(s)}+b ℒ－1{G(s)}= ℒ－1

No. 25

 find 

ℒ－1ℒ－10.2ℒ－1ℒ－1



No. 26

 find 

ℒ－1ℒ－1ℒ－1ℒ－1

No. 27

 find 

ℒ－1ℒ－1 ℒ－1

No. 28

 find 

ℒ－1ℒ－1ℒ－1ℒ－1

No. 29

 find 

ℒ－1ℒ－1ℒ－1ℒ－1ℒ－1

No. 30

 find 

ℒ－1ℒ－1ℒ－1ℒ－1

No. 31

 find 

ℒ－1ℒ－1ℒ－1

No. 32

 find 

If  ℒ－1ℒ－1

If  ℒ－1ℒ－1

No. 33

ℒ

First shift theorem ℒ

ℒ

No. 34

ℒ

First shift theorem ℒ

ℒ

No. 35

ℒ

First shift theorem ℒ

ℒ

No. 36

ℒ



First shift theorem ℒ

ℒℒℒ



No. 37

ℒ-1

No. 38

ℒ-1ℒ－1

No. 39

ℒ-1ℒ-1

No. 40

ℒ－1ℒ－1ℒ－1

No. 41

 find 

ℒ－1ℒ－1ℒ－1



No. 42

ℒ－1ℒ－1



No. 43

 find 

ℒ－1ℒ－1ℒ－1 ℒ－1

ℒ－1

No. 44

 find 

ℒ－1ℒ－1ℒ－1ℒ－1



No. 45

 find 

ℒ－1