**Transforms of Derivatives and Integrals:**

If ,where

**Example8:** Find Laplace transform of the following functions

(a)(b) (c) (d)

Solution: (a)

(b)

(c)=

(d)

=

**DIVISION BY :**

IF

**Example8:** Find Laplace transform of the following functions

1. (b)(c)(d)

Solution: (a)

Comparing with division by t property, here

Therefore

.

(b)

Comparing with division by t property, here

Therefore

(

(c)

Comparing with division by t property, here

Therefore

(d)

Comparing with division by t property, here

Therefore

.