Inverse Laplace Transform

PROPERTY OF LINEARITY

CHOOSE THE CORRECT ANSWER

Find the Inverse Laplace transform for the following equation by using the property of linearity of Laplace Transform

01

$$F(s) = \frac{2s+5}{s^2+25}$$

$f(t) = 2\sin 5t + \cos 5t$
$f(t) = 2\cos 5t + \sin 5t$
$f(t) = \cos 5t + 2\sin 5t$

02

$$F(s) = \frac{6s-4}{s^2-49}$$

$f(t) = 6\cosh 7t - \frac{4}{7}\sinh 7t$
$f(t) = \cosh 7t - \frac{4}{7}\sinh 7t$
$f(t) = 6\cosh 7t - 4\sinh 7t$

03

$$F(s) = \frac{s+9}{s^2+9}$$

$f(t) = \sin 3t + 3\cos 3t$
$f(t) = \cos 3t + \sin 3t$
$f(t) = \cos 3t + 3\sin 3t$

LIVEWORKSHEETS