

# My Exercises Database

June 15, 2021

## **Question 1**

The inverse-Laplace transform of  $F(s) = \frac{5s+1}{s^2-25}$  is:

1.  $f(t) = \frac{1}{5}e^{-5t}(13e^{10t} + 12)$
2.  $f(t) = \frac{5}{e}^{-5t}(15e^{10t} + 12)$
3.  $f(t) = \frac{1}{5}e^{-t}(13e^{10t} + 12)$
4.  $f(t) = \frac{5}{e}^{-5t}(13e^{10t} + 12)$

## **Question 2**

The phase angle of  $3 - j4$ , where  $j$  is the imaginary unit, is

1. 5
2. -4
3.  $\arctan\left(\frac{-4}{3}\right)$
4.  $\cos(3) - j\sin(4)$
5. none of the above
6. I do not know

***Question 3***

$x^{3^2}$  is equal to

1.  $x^1$
2.  $x^5$
3.  $x^6$
4.  $x^9$
5. none of the above
6. I do not know