

Multiple-Choice Test

Chapter 03.01

Background Nonlinear Equations

- The value of x that satisfies $f(x) = 0$ is called the
 - root of an equation $f(x) = 0$
 - root of a function $f(x)$
 - zero of an equation $f(x) = 0$
 - none of the above
- A quadratic equation has _____ root(s).
 - one
 - two
 - three
 - four
- For a certain cubic equation, at least one of the roots is known to be a complex root. How many total complex roots does the cubic equation have?
 - one
 - two
 - three
 - cannot be determined
- An equation such as $\tan x = x$ has _____ root(s).
 - zero
 - one
 - two
 - infinite
- A polynomial of order n has _____ zeros.
 - $n - 1$
 - n
 - $n + 1$
 - $n + 2$
- The velocity of a body is given by $v(t) = 5e^{-t} + 4$, where t is in seconds and v is in m/s. The velocity of the body is 6 m/s at $t =$ _____ seconds.
 - 0.1823
 - 0.3979
 - 0.9163
 - 1.609

[Complete Solution](#)