***Solution*** ***Section* 2.4 –Derivatives of Trigonometric Functions**

***Exercise***

Find the derivative of 

***Solution***



***Exercise***

Find the derivative of 

***Solution***





***Exercise***

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***Exercise***

Assume that a particle’s position on the *x*-axis is given by 

1. Find the particle’s position when 
2. Find the particle’s velocity when 

***Solution***

1. 





















1. 























***Exercise***

A weight is attached to a spring and reaches its equilibrium position . It is then set in motion resulting in a displacement of 

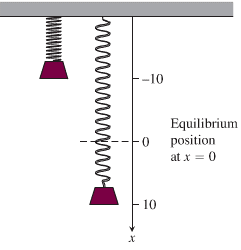
Where *x* is measured in centimeters and *t* is measured in seconds.

1. Find the spring’s displacement when 
2. Find the spring’s velocity when 

***Solution***

1. 





















1. 



















