Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ AP Calculus

Quick Review: Sections 3.3 – 3.6 version 2

Show all your work!

1. The position of a particle moving along the *x*-axis is given by . Find the particle’s position, velocity, and acceleration at *t* = 3. Is the particle moving to the right or left at *t* = 3?

Is the particle’s speed increasing or decreasing at *t* = 3?

2. Find the derivative of each function.

 a) 

 b) 

 c) 

 d) 

3. Write the exact value. (No calculator allowed!)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  (degrees) | 0 | 30 | 45 | 60 | 90 | 180 | 270 |
|  (radians) |  |  |  |  |  |  |  |
| sin   |  |  |  |  |  |  |  |
| cos  |  |  |  |  |  |  |  |
| tan  |  |  |  |  |  |  |  |