Pre-Calc/Trig Quiz 5

Level 2

Graph and Identify Key Points.

Level 3

Estimate the Limit.

Level 4

5. The path of a ball thrown by a child  
is modeled by: where  
y is the height of the ball and x is the distance  
from the point from which the ball is thrown.  
Using your knowledge of slopes of tangent lines,  
show that the height of the ball is increasing on  
the interval [0,2] and decreasing on the interval  
[3,5]. Explain your reasoning.