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1. Solution:



1. Solution:



Since , then the tangent line at the point  is

,

and the corresponding normal line is

.

P191:

22.Solution:

 or 

1. Solution:



P199

1. Solution: Let  be the length of the string, and  be the horizontal distance between the kite and the girl at time *t*, then



When , then . Since

,

then when ,



When the kite is 500 ft away from her, she should let out the string at rate of 20feet per second.