Name:

## Directions Use logarithmic differentiation to find the derivatives of the given functions.

1. $y=(5 x+3)^{x}$
2. $y=\sqrt{x} \sin (x) \cos (x)$

Directions Use logarithmic differentiation to find the derivatives of the given functions

1. $y=x^{5 x+3}$
2. $y=x^{2} \cos (x) \sin (x)$
