- 1. this problem concerns the function  $f(x) = (x-1)^{(x-1)}$ .
  - (a) Use logarithmic differentiation to find its derivative.

- (b) f'(2) =
- (c) f(2) =
- (d) Find the equation of the tangent line to the graph of y = f(x) at the point (2, f(2)).

- 1. this problem concerns the function  $f(x) = (2x 3)^x$ .
  - (a) Use logarithmic differentiation to find its derivative.

- (b) f'(2) =
- (c) f(2) =
- (d) Find the equation of the tangent line to the graph of y = f(x) at the point (2, f(2)).