

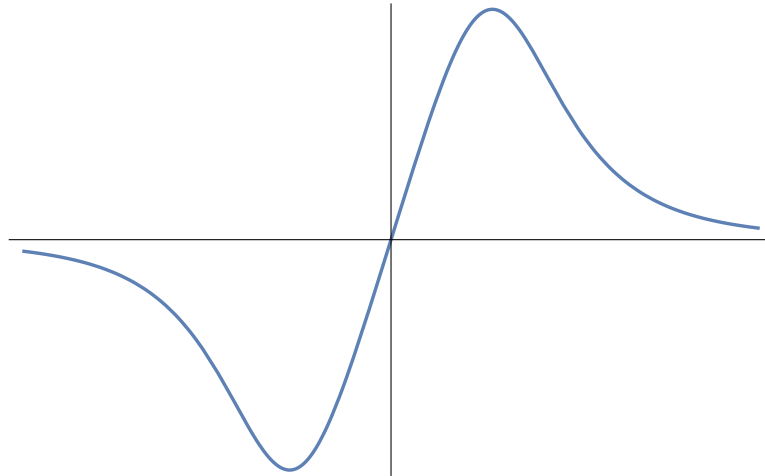
**MAT 136 (Calculus I), Prof. Jim Swift**  
**Worksheet on Interpretation of the derivative**

1. Suppose  $m = f(v)$  is the mileage (in mpg) of a car as a function of  $v$  (in mph).

(a) What are the units of  $f'(v) = \frac{dm}{dv}$ ?

(b) What is the sign of  $f'(60)$ ? Explain the answer.

2. Sketch the derivative of the function plotted on the same axes.



**MAT 136 (Calculus I), Prof. Jim Swift**  
**Worksheet on Interpretation of the derivative**

1. Suppose  $m = f(v)$  is the mileage (in mpg) of a car as a function of  $v$  (in mph).

(a) What are the units of  $f'(v) = \frac{dm}{dv}$ ?

(b) What is the sign of  $f'(60)$ ? Explain the answer.

2. Sketch the derivative of the function plotted on the same axes.

