Math 2253 Practice Test 2 Fall 2016

1. Find the derivative of each of the following functions:

 (a)  (b) 

 (c)  (d) 

2. Find the slope of the graph of the function at the given point:

  (2, 18)

3. Find an equation of the line tangent to  at (−1, −2)

4. Find the points at which the graph of the function has a horizontal tangent line:

 

5. Find the derivative of each of the following functions:

 (a)  (b) 

6. Find the derivative of each of the following functions

(a) 

(b) 

(c) (To test your understanding of the chain rule). You read in an article that the derivative of where  is . Find the derivative of 

7. Find the derivative of each of the following functions:

(a)  (b) 

(c)  (d) 

8. Find the second derivative of each of the following functions.

 (a)  (b) 