MATH 201 Your name: _____

Chapter 2 checkpoint!

Chapter 1 scorecard:

Learning target:	DF1	DF2	DFa	DFb	AD2
Your confidence level before starting (0-5):					
Your confidence level after the quiz (0-5):					
The mark you earned on this attempt:	Success! Try again!	Success! Try again!	Success! Try again!	Success! Try again!	Success! Try again!

Chapter 2 scorecard:

Learning target:	DF3	DF4	DF5	DF6	DF7
Your confidence level before starting (0-5):					
Your confidence level after the quiz (0-5):					
The mark you earned on this attempt:	Success! Try again!	Success! Try again!	Success! Try again!	Success! Try again!	Success! Try again!

Before anything else, please do the following:

- Rank your confidence from 0-5 on each of the learning targets. 5 means "I could teach a whole class about this;" 0 means "I am genuinely not sure I have heard these words before."
- Write your name on this page and on each of the other pages of the quiz.

Then do the quiz! Some reminders:

- Open notes, closed computer.
- If you need more room to write, use the back of the same learning target page, or ask me for some scratch paper.
- Read the questions carefully and make sure you're answering each part.
- Use good grammar for derivative problems.
- Show all your work and explain all your thinking!

When you are done:

- Rank your confidence from 0-5 on each of the learning targets. 5 means "I absolutely nailed that question for sure;" 0 means "oof, I definitely didn't get that one."
- Make double sure your name is on every page, including any scratch paper.
- Hand in your work, separated by learning target.

Have fun and do your best! I believe in u ♡

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Learning target DF3, version 2

Demonstrate and explain how to find the derivative of the following functions. Be sure to write down which derivative rules (constant multiple, sum/difference, etc.) you are using in your work.

1. $h(y) = -4\ln(y) + 3\sin(y)$

2. $g(t) = \sqrt[4]{t^3} + \dfrac{7}{t^4}$

3. $f(x) = -x^5 - 4x^4 + 5x - 4$

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Learning target DF4, version 2

Demonstrate and explain how to find the derivative of the following functions. Be sure to write down which derivative rules (product, quotient, sum and difference, etc.) you are using.

1. $h(w) = -\dfrac{\cos(w)}{6w^2+5w+4}$

2. $g(w) = \dfrac{3w^2+5w-1}{w^8}\cos(x)$

3. $f(w) = -\left(4w^2+6w+1\right)\ln(w)$

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Learning target DF5, version 3

Demonstrate and explain how to find the derivative of the following functions. Be sure to explicitly denote which derivative rules (product, quotient, sum and difference, etc.) you are using in your work.

1. $$k(t) = 8\cos(t)^{\frac{7}{5}}$$

2. $$f(w) = 8\cos\left(w^{\frac{7}{5}}\right)$$

3. $$h(x) = \sin\left(-2x^2 + 5x - 4\right)$$

4. $$g(y) = -(5y - 4e^y + 4)^5$$

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Learning target DF6, version 2

Demonstrate and explain how to find the derivative of the following functions. Be sure to write down which derivative rules (constant multiple, sum and difference, etc.) you are using.

1. $f(w) = \left(\dfrac{5w^6+1}{5w^6+2}\right)^6$

2. $g(x) = \left(5x^5 - 2x^3\right)^6 \sqrt{x}$

3. $h(y) = \sqrt{\sin\left(-2y^4+4\right)}$

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Learning target DF7, version 2

1. Use implicit differentiation to find $\frac{dy}{dx}$, aka y', for the equation $5x^5 - 2\sin(y) = -8y^3 - 7$.

2. Use implicit differentiation to find $\frac{dy}{dx}$, aka y', for the equation $0 = -y\cos(x) - 2e^x$.