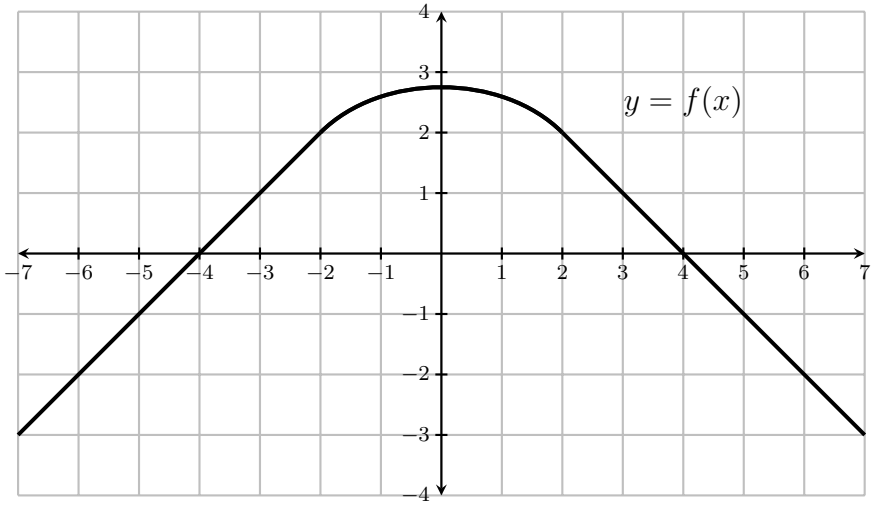
Name: _____

Quiz 7

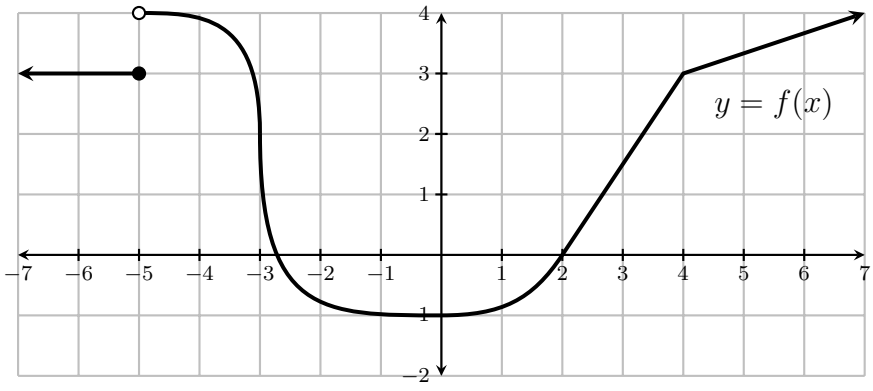
MATH 200
September 14, 2023

1. (7 pts.) Find all values of x at which the tangent line to $f(x) = 2 + e^x - x$ is horizontal.

2. (7 pts.) The graph of a function $f(x)$ is shown below.
Using the same coordinate axis, sketch the graph of its derivative $f'(x)$



3. (6 pts.) This problem concerns the function $f(x)$ sketched below.



(a) State the x-values at which f is **not continuous**.

(b) State the x-values at which f is **not differentiable**.

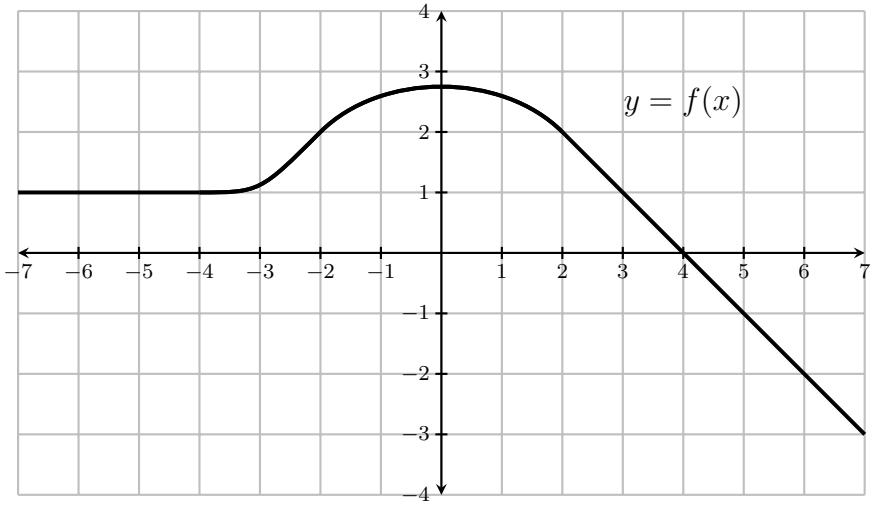
Name: _____

Quiz 7

MATH 200
September 14, 2023

1. (7 pts.) Find all values of x at which the tangent line to $f(x) = \dfrac{x}{e} - e^x$ is horizontal.

2. (7 pts.) The graph of a function $f(x)$ is shown below.
Using the same coordinate axis, sketch the graph of its derivative $f'(x)$



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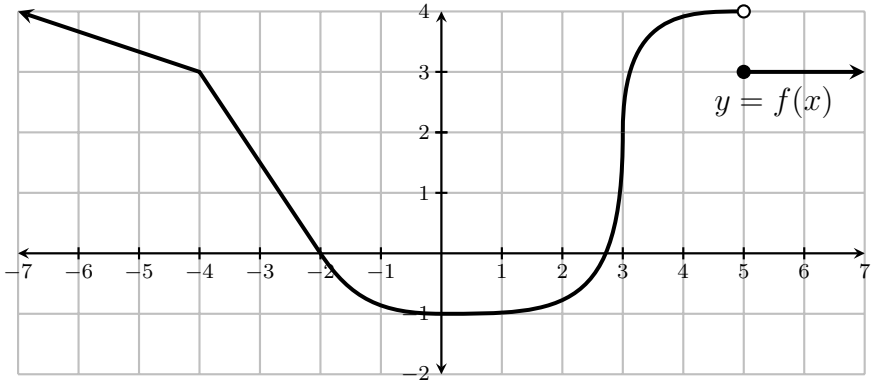

(a) State the x-values at which f is **not continuous**.

(b) State the x-values at which f is **not differentiable**.