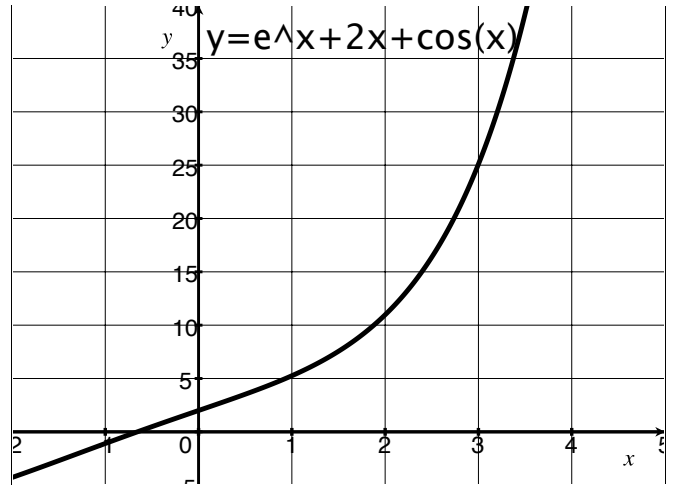


TMATH 124: Concept Check Day 18

Be sure to write down your ideas (numerically, algebraically, or geometrically) so that you can earn credit for your work!! To earn full marks for this you must attempt all problems.

1. Find an *antiderivative* of $f(x) = e^x + 2x + \cos(x)$.



2. Find *the* antiderivative of $f(x) = e^x + 2x + \cos(x)$.

3. Identify the area on the graph above described by

$$\int_0^{\pi} e^x + 2x + \cos(x) dx \text{ on the graph.}$$

4. Find the (exact) area described by

$$\int_0^{\pi} e^x + 2x + \cos(x) dx$$