

Math 132 - Quiz 1 (IC)

August 24, 2022

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) Find the area of the bounded region between the graphs of $y = x^2 - 7$ and $y = x - 1$.

2. (3 points) Find the total (combined) area of the bounded regions between the graphs of $y = x^3$ and $y = x^2 + 2x$.
(Helpful info: The equation $x^3 = x^2 + 2x$ has solutions $x = -1$, $x = 0$, and $x = 2$.)

Math 132 - Quiz 1 (TH)

August 24, 2022

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is due August 31.

1. (2 points) For review, evaluate the indefinite integral: $\int 7x^2 \sin(x^3) dx$

2. (2 points) The 1st-quadrant region between the x -axis and the graph of $y = 3x - x^2$ is rotated about the x -axis. Find the volume of the solid that is generated.