

Chapter 10 – Section 10.2 Inverse Functions

TICKET-IN-THE-DOOR

In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class.

Check your understanding:

1. Let $f(x) = 3^x$ and $g(x) = f(f(x))$. Evaluate $g^{-1}(27)$.

2. For positive numbers x , what is the **inverse** of $h(x) = e^{\sqrt{x}-4}$?

3. Determine whether or not $y = 6x^2 + 1$ is **invertible**. Explain.

4. Let $P = 25 \ln(t)$ give the annual profit of a company (in thousands of dollars) t years after its formation. What is $P^{-1}(37)$ and what does this value represent? Round to the nearest whole number and include units.