Unit 1 Practice Test   Name:_____

Identity Function $y = x$	Squaring Function $y = x^2$	Cubing Function $y = x^3$	Reciprocal Function $y = \dfrac{1}{x}$
Square Root Function $y = \sqrt{x}$	Absolute Value Function $y = |x|$	Exponential Function $y = e^x$	Natural Logarithm Function $y = \ln x$
Sine Function $y = \sin x$	Cosine Function $y = \cos x$	Greatest Integer Function $y = int\ [x]$	Logistic Function $y = \dfrac{1}{1 + e^{-x}}$

1. Which two functions have a range of $[0, \infty)$? Which function has a domain of $(0, \infty)$?

2. Which three functions have one or more horizontal asymptotes?

3. Which four functions are odd?

4. Which 5 functions do **NOT** have the end behavior $\lim_{x \to \infty} f(x) = \infty$?

5. Which 3 functions have no zeroes/roots/x-intercepts?