

Quarter 4 Spiral Review 6 Math II

Due May 12 {Due to class being cancelled because of carnival on Friday, May 13}

1. Identify the transformations from the parent function $f(x) = 3^x$: $f(x) = (2)3^x - 5$
2. What is the equation for the horizontal asymptote? $f(x) = (2)3^x - 5$
3. What are the coordinates for the y-intercept? $f(x) = (2)3^x - 5$
4. What is the equation for the inverse function: $f(x) = -\frac{2}{3}x - 8$
5. Solve the equation for b_2 : $A = \frac{1}{2}h(b_1 + b_2)$
6. Is this function even, odd, or neither? $f(x) = -3x - x^5$
7. What is the amplitude and period of this trigonometric function? $f(x) = -4 \sin 9\theta$
8. Evaluate this logarithmic expression: $\log_3 \frac{1}{243}$
9. Simplify: $\left(64a^8b^{-2}c^{-\frac{2}{3}}\right)^{\frac{3}{2}}$
10. A spotlight is mounted on a wall 7.4 feet above a security desk in an office building. It is used to light an entrance door 9.3 feet from the desk. To the nearest degree, what is the angle of depression from the spotlight to the entrance door?