

Name _____ Date _____ Period _____

Worksheet 5.6B—Xtra Practice with the Trig Functions

No Calculator. Do all work on a separate sheet of paper.

For each of the problems below, answer the following questions **without graphing the equation**, but rather from your knowledge of the parent functions and transformations. Show any formulas and calculations made.

- (a) Put the function into standard transformation form with a POSITIVE value of B using symmetry.
- (b) Find the period, P , of the function.
- (c) Find the domain, D , of the function.
- (d) Find the range, R , of the function.

1. $f(x) = -2 \csc\left(\pi x + \frac{\pi}{2}\right) - 5$

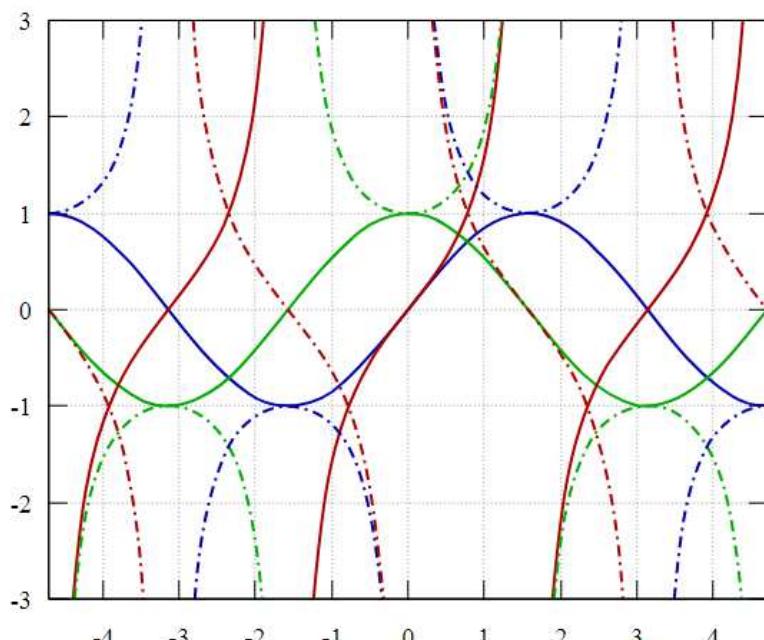
2. $f(x) = 2 - 4 \cos(-4x - \pi)$

3. $f(x) = 3 + 4 \cot\left(\frac{\pi}{3} + \frac{\pi x}{6}\right)$

4. $f(x) = 6 \tan\left(-\frac{\pi}{4} + \frac{\pi x}{4}\right) - 3$

5. $f(x) = 4 + \frac{3}{2} \sec\left(-\frac{\pi}{2} - 4x\right)$

6. $f(x) = -5 \sin\left(-\frac{2}{3}x - \frac{\pi}{6}\right) - 4$



Tattoo idea??!!