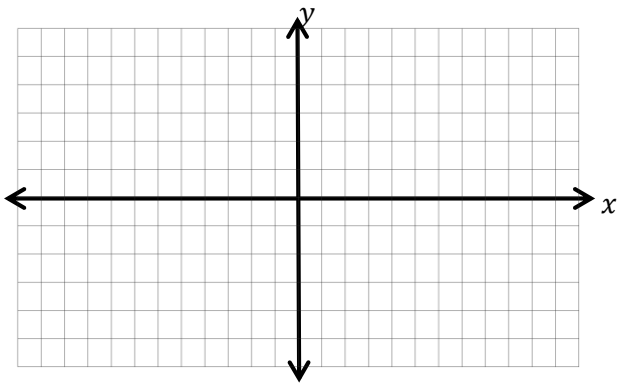
Assignment 8B.1-Tangent & Cotangent

Describe how the graph the following curves differs from $y = \tan x$ and $y = \cot x$. Make sure you state the period and the vertical stretch.

1. $y = 2\tan 3x$
2. $y = -\tan\left(\frac{x}{2}\right) - 5$
3. $y = 5\cot(x + 3) + 12$

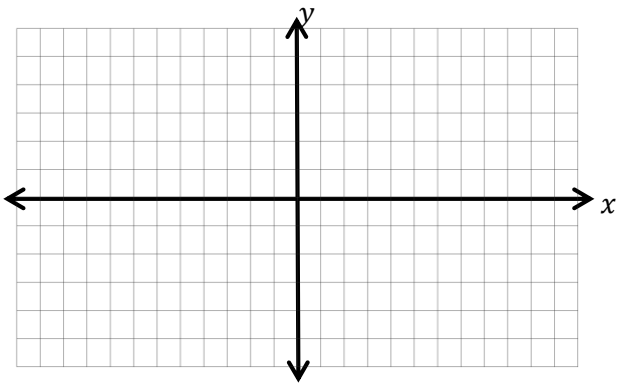
Graph at least two periods for the following functions. State the period of each function and the location of the asymptotes.

4. $y = -2\tan x$



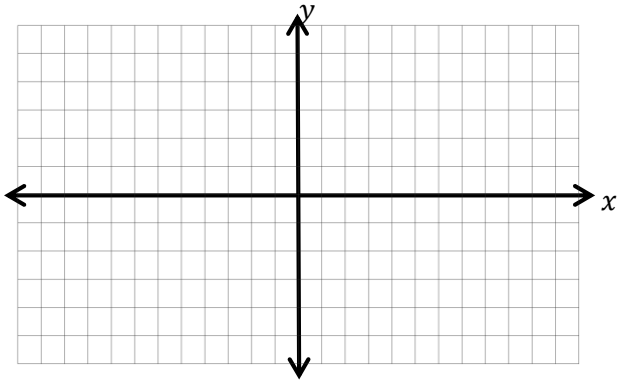
Period= asymptotes=

5. $y = \frac{1}{2}\tan(x + \pi)$



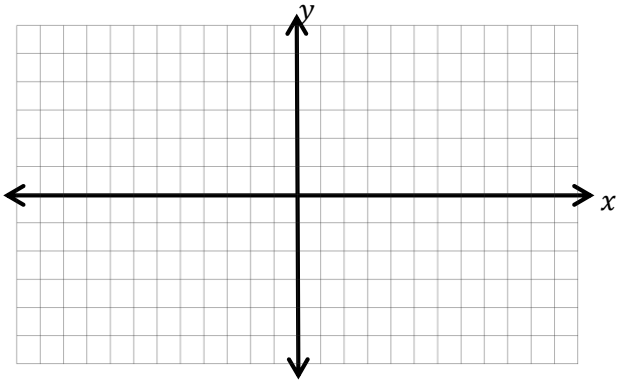
Period= asymptotes=

6. $y = \cot(2x)$



Period= asymptotes=

7. $y = \cot(-x)$



Period= asymptotes=