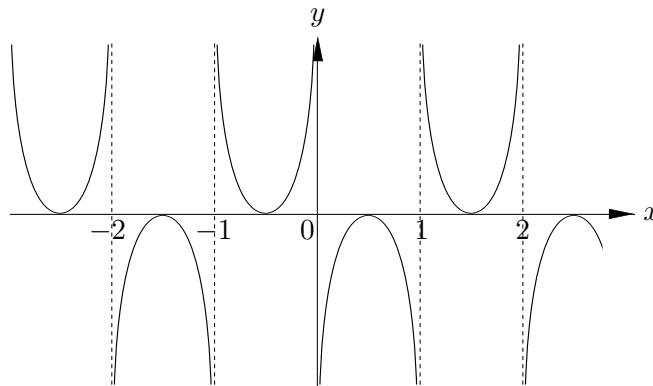


1. [12 points] For each of the following graphs of functions, write down
- the period if the function could be periodic with a period less than 10, or **NONE** otherwise.
  - the equation of a horizontal asymptote if it has horizontal asymptotes, or **NONE** otherwise.
  - the equation of a vertical asymptote if it has vertical asymptotes, or **NONE** otherwise.
- a. [6 points]

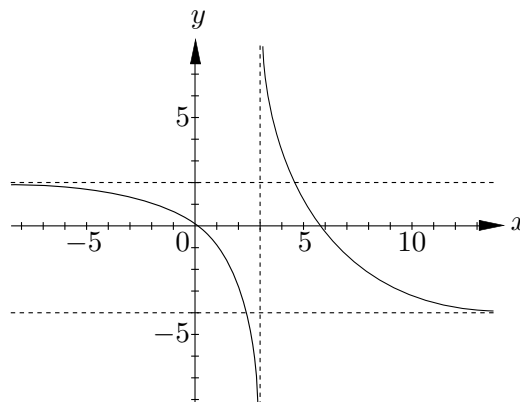


Period = \_\_\_\_\_.

Equation of a vertical asymptote: \_\_\_\_\_.

Equation of a horizontal asymptote: \_\_\_\_\_.

- b. [6 points]



Period = \_\_\_\_\_.

Equation of a vertical asymptote: \_\_\_\_\_.

Equation of a horizontal asymptote: \_\_\_\_\_.