

Name _____

Section 0242

Answer all problems. There are 10 possible points.

$$\text{Let } f(x) = \frac{3x}{x^2 + 2}$$

1) (1pt) Find the domain of the function

2) (1pt) Find the x - intercept and y - intercept

3) (1pt) Find vertical asymptotes

4) (1pt) Find horizontal asymptotes

5) (1pt) Locate all critical points

6) (1pt) Find all intervals that the function is increasing or decreasing

7) (1pt) Find all intervals that the function is concave downward or concave downward

8) (3pts) Graph the function