

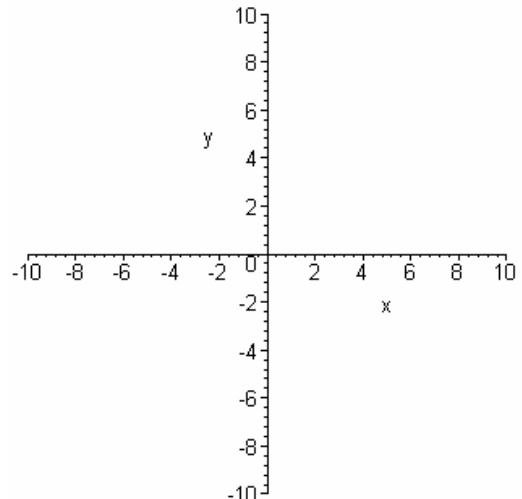
Name:

## QUIZ - MATH GRADE 11 SL

1. (8%) Vertical asymptotes exist if \_\_\_\_\_ tends to \_\_\_\_\_ and \_\_\_\_\_ tends to \_\_\_\_\_
2. (8%) Horizontal asymptotes exist if \_\_\_\_\_ tends to \_\_\_\_\_ and \_\_\_\_\_ tends to \_\_\_\_\_
3. (84%) Given the function:  $f(x) = \frac{2}{(2-x)} + 3$ 
  - a. (4%) State the domain of the function: \_\_\_\_\_
  - b. (9%) Write the corresponding limits (if any) **and the conclusion:**

- c. (9%) Write the corresponding limits (if any) **and the conclusion:**

- d. (2%) find the y intercept(s).



- e. (8%) Find the x intercept(s).

- f. (10%) Sketch the function

Given the function:  $f(x) = \left( \frac{2}{(2-x)} + 3 \right) \left( \frac{x+1}{x+1} \right)$

g. (10%) State the domain of the function: \_\_\_\_\_

h. (20%) Find the corresponding limits and the conclusions:

$$(3\%) \lim_{x \rightarrow (-1)^-} (f(x)) =$$

$$(3\%) \lim_{x \rightarrow (-1)^+} (f(x)) =$$

(4%) Conclusion: \_\_\_\_\_

$$(3\%) \lim_{x \rightarrow (2)^-} (f(x)) =$$

$$(3\%) \lim_{x \rightarrow (2)^+} (f(x)) =$$

(4%) Conclusion: \_\_\_\_\_

i. (12%) Sketch the function

