

- (1) (a) Sketch the following graphs on the same Cartesian plane and use the graphs to answer the questions below:

$$f(x) = \frac{4}{x} \quad \text{with } x > 0$$

and

$$g(x) = 4^x$$

- Write down the equation(s) of the asymptote(s).
- Write down the domain of g .
- Determine x if $f(x) = g(x)$ and indicate where the reading was made on the graph.

[illegible]

- (2) (a) Sketch the following graphs on the same Cartesian plane and use the graphs to answer the questions below:

$$p : x \rightarrow x^2 + 1$$

and

$$t : x \rightarrow 2$$

- Write down the equation of the symmetry axis of p .
- Write down the range of p .
- Determine the coordinates of $p \cap t$ and indicate where the reading was made on the graph.

