

Name:

QUIZ – MATH GRADE 11 IB SL

1. (30%) Given the function $f(x) = x^3 \quad -3 \leq x < 4$

- a. (4%) Find $f(-1) = \underline{\hspace{2cm}}$, Fill the blank and add the point to the graph.
b. (4%) $f(2) = \underline{\hspace{2cm}}$, Fill the blank and sketch the point on the graph.

c. (5%) $f(\underline{\hspace{2cm}}) = -27$

Fill the blank and sketch the point on the graph.

- d. (4%) y intercept: $\underline{\hspace{2cm}}$



- e. (4%) x intercept(s): $\underline{\hspace{2cm}}$

- f. (4%) Sketch the function

- g. (5%) Range: $\underline{\hspace{2cm}}$

2. (34%) Given the function $f(x) = x^3 + 3x^2 - 4 \quad -4 \leq x \leq 2$

- a. (4%) Find $f(-1) = \underline{\hspace{2cm}}$, Fill the blank and add the point to the graph.
b. (4%) $f(1) = \underline{\hspace{2cm}}$, Fill the blank and sketch the point on the graph.

c. (7%) $f(\underline{\hspace{2cm}}) = 4$

Fill the blank and sketch the point(s) on the graph.

- d. (4%) y intercept: $\underline{\hspace{2cm}}$



- e. (6%) x intercept(s): $\underline{\hspace{2cm}}$

- f. (4%) Sketch the function

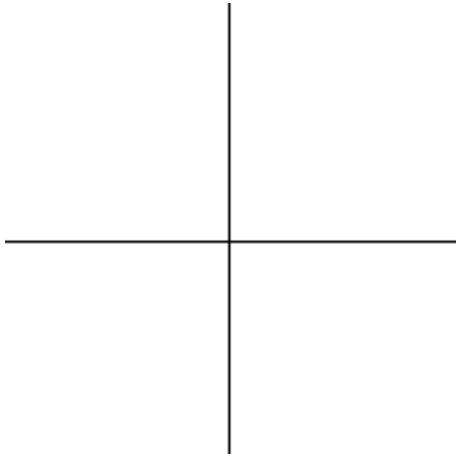
- g. (5%) Range: $\underline{\hspace{2cm}}$

3. (36%) Given the function $f(x) = 2x^3 + x^2 - 2x - 1$ $-2 \leq x \leq 2$

- a. (4%) Find $f(2) = \underline{\hspace{2cm}}$, Fill the blank and add the point to the graph.
b. (4%) $f(-2) = \underline{\hspace{2cm}}$, Fill the blank and sketch the point on the graph.

c. (7%) $f(\underline{\hspace{2cm}}) = 4$

Fill the blank and sketch the point(s) on the graph.



- d. (4%) y intercept: $\underline{\hspace{2cm}}$

- e. (8%) x intercept(s): $\underline{\hspace{2cm}}$

- f. (4%) Sketch the function

- g. (5%) Range: $\underline{\hspace{2cm}}$