

Name:

QUIZ – MATH GRADE 11 IB SL

1. (33%) Given the function $f(x) = \sqrt{x+7}$

 - (4%) State the domain of the function: _____
 - (4%) Find $f(-7) =$ _____, Fill the blank and add the point to the graph.
 - (3%) $f(2) =$ _____, Fill the blank and sketch the point on the graph.

d. (4%) $f(\underline{\hspace{1cm}}) = 2$

Fill the blank and sketch the point on the graph.

- e. (4%) y intercept: _____

f. (5%) x intercept: _____

g. (4%) Sketch the function

h. (5%) Range: _____

2. (33%) Given the function $f(x) = -\sqrt{2x+2} + 5$

 - (4%) State the domain of the function: _____
 - (4%) Find $f(-1) = \underline{\hspace{2cm}}$, Fill the blank and add the point to the graph.
 - (3%) $f(1) = \underline{\hspace{2cm}}$, Fill the blank and sketch the point on the graph.

d. (4%) $f(\underline{\hspace{1cm}}) = 2$

Fill the blank and sketch the point on the graph.

- e. (4%) y intercept: _____

f. (5%) x intercept: _____

g. (4%) Sketch the function

h. (5%) Range: _____

3. (34%) Given the function $f(x) = -4\sqrt{6-3x} + 2$

a. (4%) State the domain of the function: _____

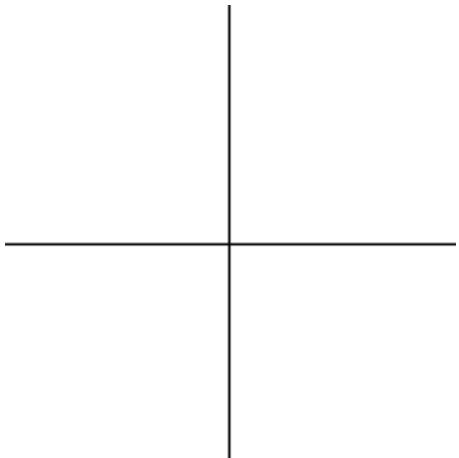
b. (4%) Find $f(2) = \underline{\hspace{2cm}}$, Fill the blank and add the point to the graph.

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

d. (4%) $f(\underline{\hspace{2cm}}) = 1$

Fill the blank and sketch the point on the graph.

e. (4%) y intercept: _____



f. (5%) x intercept: _____

g. (4%) Sketch the function

h. (5%) Range: _____

BONUS (10%)

Given the quadratic function $f(x) = ax^2 + 10x - 3$. The line $x = 4$ is the axis of symmetry.
Find a .