

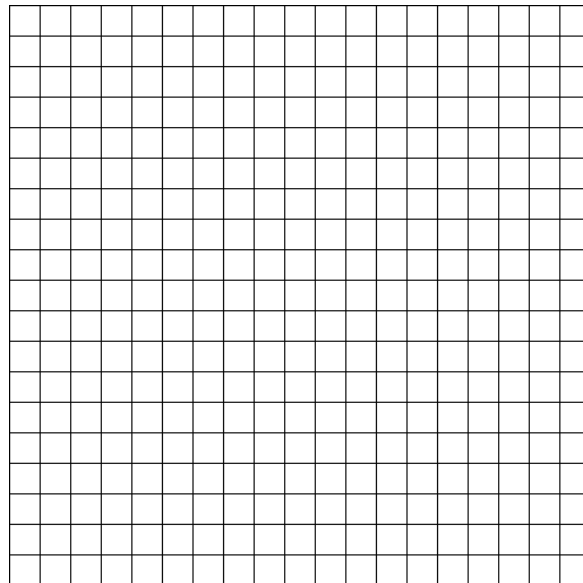
### Cubic and reciprocal graphs

**Question 1** –  $f(x) = -x^3 - 4x^2 + x + 6$

a) Complete the table below

x	-3	-2	-1	0	1	2	3
f(x)							

b) Sketch the graph of your function



c) What are the roots of the equation?

d) What is the y-intercept?

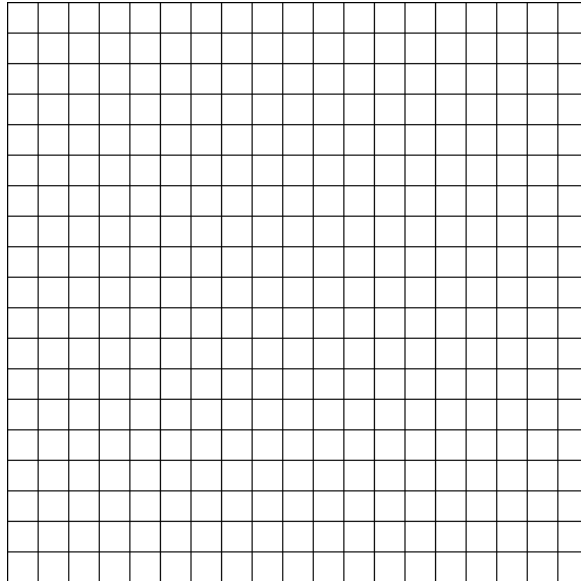
**Question 2** –  $f(x) = 1/x$

a) Complete the table below

x	-3	-2	-1	0	1	2	3
f(x)							

b) What are the asymptotes?

c) Sketch the graph of the function

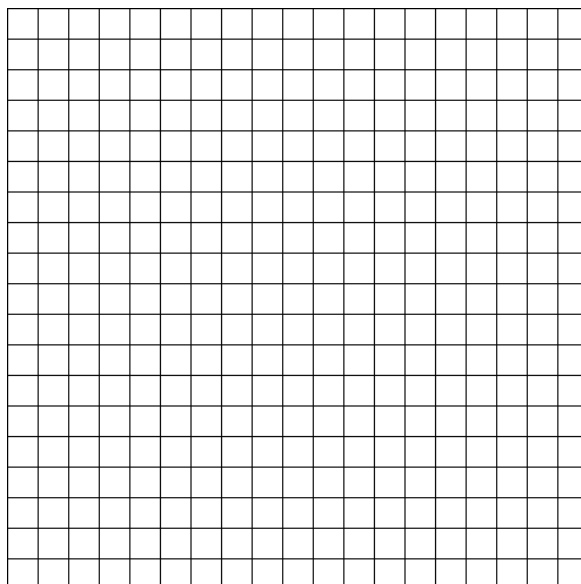


**Question 3** –  $f(x) = 3 / x^2$

a) Complete the table below

x	-3	-2	-1	0	1	2	3
f(x)							

b) Sketch the graph of the function



c) What are the asymptotes?

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**Question 4** – Write the asymptotes for the following functions:

a)  $f(x) = \frac{1}{x+1}$

b)  $f(x) = 2 + \frac{1}{2x-4}$