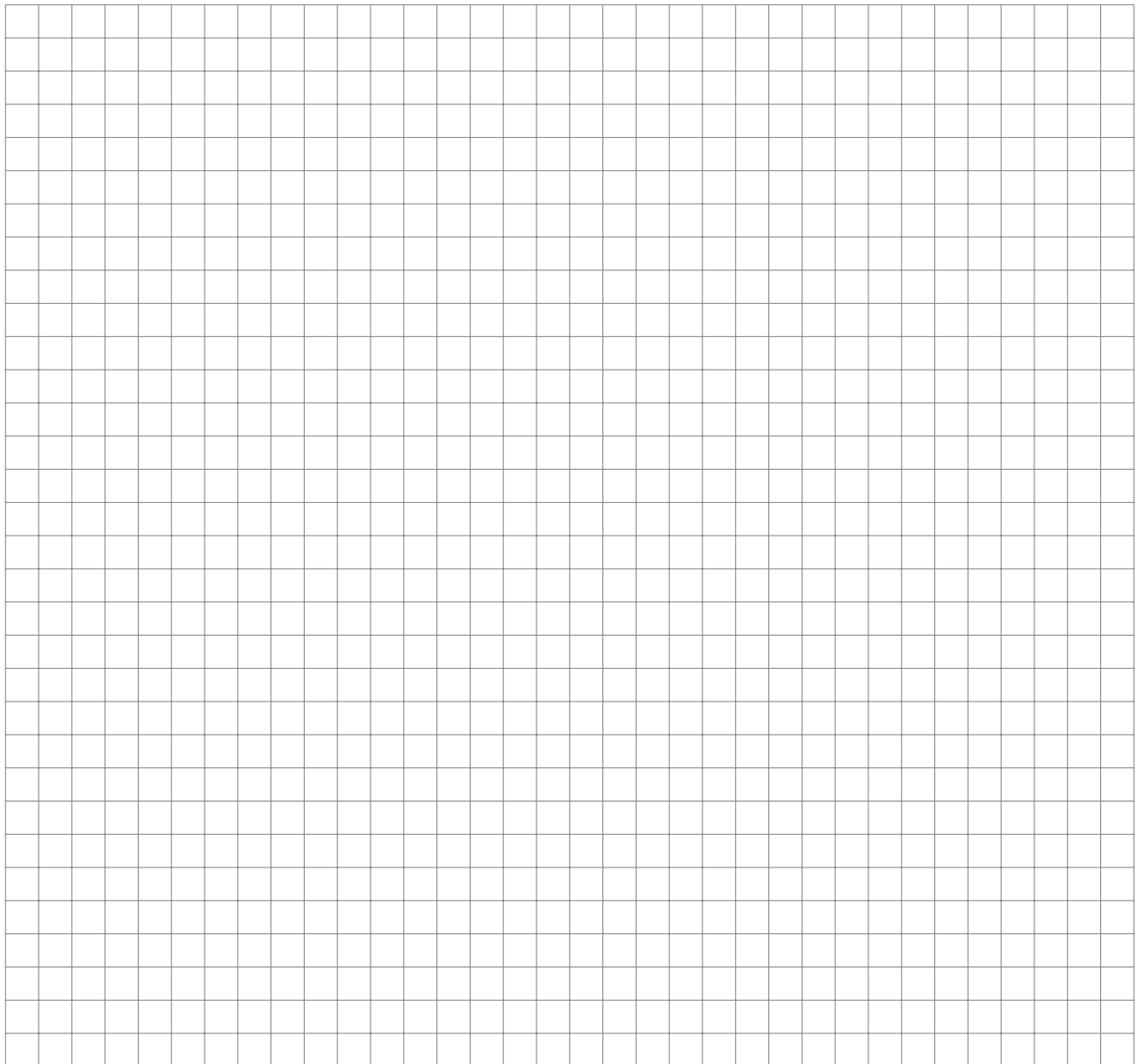


Name:

Group 1

Result:

1. *(3 points)*
Sketch the graph of $f(x) = |2^{1-|x|} - 1|$. Clearly indicate any asymptotes and axes intercepts.



2.*(6 points)*

Solve the following equations:

(a) $4^{x-1} = \left(\frac{1}{\sqrt{2}}\right)^{x+1}$

(b) $3^{2x-1} = 5^{x-2}$

(c) $2^{2x+1} + 3 = 7 \cdot 2^x$

3.*(3 points)*

Let $a = \log_3 2$ and $b = \log_3 5$. Find in terms of a and b :

(a) $\log_3 40$

(b) $\log_2 30$

(c) $\log_{25} 12$