

Question 1 (1 mark) — / 1

1 + 1 is:

- A. 1
- B. 2
- C. 0

Question 2 (7 marks) — / 7

Let $g: \mathbb{R} \setminus \{2\} \rightarrow \mathbb{R}$, $g(x) = \frac{4}{(x-2)^2} - 1$

a) What is $g(x)$ if:

i) $g(x) = 0$ — / 1

ii) $g'(x) = 0$ — / 2

b) Is g bijective? — / 1

- A. Yes
- B. No

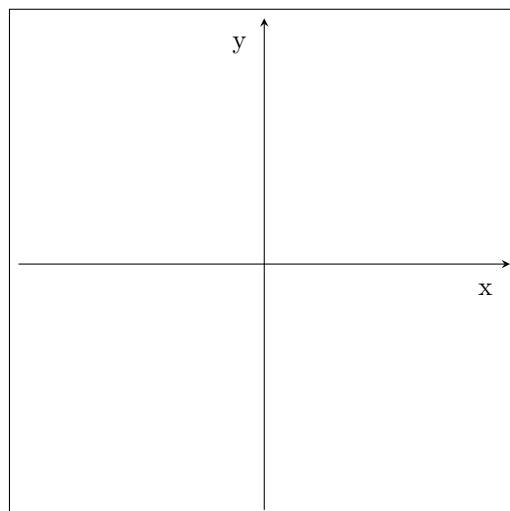
c) Here's a free mark for using L^AT_EX! — / 1

d) What is the range of g ? — / 2

- A. $\mathbb{R} \setminus \{2\}$
- B. \mathbb{R}
- C. \emptyset
- D. $\{1, 2, 3, 4, 5\}$
- E. $\{x: -1 < x, x \in \mathbb{R}\}$

Question 3 (1 mark) — / 1

Sketch the graph of: $y = e^x$



— / 10

[illegible]