

Question 14

Prove that if x is rational and $x \neq 0$, then $\frac{1}{x}$ is rational.

If x is rational, then x can be written as a fraction of two integers, a and b . If $x = \frac{a}{b}$, then $\frac{1}{x} = \frac{b}{a}$, where b and a are both integers. Therefore, $\frac{1}{x}$ is also rational.