

Worksheet: Real Numbers

Uttar Pradesh State Board · Class 10 · Mathematics · 6 questions · 16 marks

Name: _____

Date: _____

Score: _____ / 16

Q1. Find the HCF of 96 and 404 using Euclid's division algorithm. Show all steps. *[3 marks]*

Q2. If $\text{HCF}(72, 120) = 24$, find $\text{LCM}(72, 120)$ using the $\text{HCF} \times \text{LCM}$ identity. *[2 marks]*

Q3. Prove that $\sqrt{2}$ is irrational. *[3 marks]*

Q4. Prove that $5\sqrt{3}$ is irrational, given that $\sqrt{3}$ is irrational. *[3 marks]*

Q5. Without performing long division, determine whether $17/6250$ has a terminating or non-terminating decimal expansion. *[2 marks]*

Q6. Two tankers contain 850 L and 680 L of petrol. Find the maximum capacity of a container that can measure both quantities exactly (without any leftover). *[3 marks]*
