



Class 9 Maths – Chapter 3



Exercise Set 3.4 – The World of Numbers

Based on the new Ganita Manjari Grade 9 Part I textbook, page 52.



Q1. Represent the rational numbers on a single number line

Represent:



$$2/3$$



$$-5/4$$



$$11/2$$



Solution:

First convert them to mixed/decimal form to understand their positions:

$$2/3 = 0.666\dots$$

$$-5/4 = -1 \frac{1}{4}$$

$$11/2 = 5 \frac{1}{2}$$

So, on the number line:

$$-5/4 < 0 < 2/3 < 11/2$$



Place the points at:

- $-5/4 \rightarrow$ between -1 and -2
- $2/3 \rightarrow$ between 0 and 1
- $11/2 \rightarrow$ between 5 and 6



Answer: All three rational numbers can be represented on the same number line at these positions.



Q2. Find three distinct rational numbers between $-1/2$ and $1/4$.

We need numbers greater than:

$$-1/2$$

and less than:

$$1/4$$

Let's convert them to a common denominator:

$$-1/2 = -8/16$$

$$1/4 = 4/16$$

Now choose three numbers between $-8/16$ and $4/16$:

👉 $-7/16$

👉 $-6/16$

👉 $-5/16$

Therefore:

$$-1/2 < -7/16 < -6/16 < -5/16 < 1/4$$

✅ **Answer:** $-7/16$, $-6/16$ and $-5/16$

QUICK ANSWER KEY

1. Represent $-5/4$, $2/3$ and $11/2$ on the same number line.

2. Any three distinct rational numbers between $-1/2$ and $1/4$ are acceptable.

👉 One possible answer: $-7/16$, $-6/16$, $-5/16$

📌 **Exercise Set 3.4 has 2 questions** and focuses on representing rational numbers on a number line and finding rational numbers between two given rational numbers.