

SAMPLE CONTENT



MATHEMATICS WORKBOOK

BASED ON TEXTBOOK



STD.VIII
(Eng. Med.)

Target Publications® Pvt. Ltd.

Mathematics

WORKBOOK

STD. VIII (English Medium)

Salient Features

- ⇒ Includes all textual Problem Sets
- ⇒ Covers all Intext and Activity based questions from the textbook
- ⇒ Includes adequate space to write the answers
- ⇒ Includes Smart Recap at the end of the relevant chapters
- ⇒ Contains Important Formulae at the end of the book

Name:

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Target's "**Mathematics Workbook: Std. VIII**" is an excellent resource for students seeking to enhance their preparation for examinations.

Our basic premise for this book is to retain the outline of the content as textbook to facilitate students to keep their practice material together and have a single point of reference for revision.

The book includes Smart Recap at the end of the relevant chapters and Important Formulae at the end of the book as quick revision tool for the solving problems.

A book affects eternity; one can never tell where its influence stops.

Best of luck to all the aspirants!

Publisher

Edition: First

The journey to create a complete book is strewn with triumphs, failures and near misses. If you think we've nearly missed something or want to applaud us for our triumphs, we'd love to hear from you.

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Disclaimer

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Practice Set 1.1

1. Show the following numbers on a number line. Draw a separate number line for each example.

i. $\frac{3}{2}, \frac{5}{2}, -\frac{3}{2}$

Solution:

ii. $\frac{7}{5}, \frac{-2}{5}, \frac{-4}{5}$

Solution:

iii. $\frac{-5}{8}, \frac{11}{8}$

Solution:



iv. $\frac{13}{10}, \frac{-17}{10}$

Solution:

2. Observe the number line and answer the questions.



i. Which number is indicated by point B?

Solution:

ii. Which point indicates the number $1\frac{3}{4}$?

Solution:



iii. State whether the statement, ‘the point D denotes the number $\frac{5}{2}$ ’ is true or false.

Solution:

Let's Learn

Verify the following comparisons using a number line.

- $2 < 3$, but $-2 > -3$
- $\frac{5}{4} < \frac{7}{4}$, but $\frac{-5}{4} > \frac{-7}{4}$

(Textbook pg. no. 3)

Solution:



Practice Set 1.2

1. Compare the following numbers.

i. $-7, -2$

Solution:

ii. $0, -\frac{9}{5}$

Solution:

iii. $\frac{8}{7}, 0$

Solution:

iv. $-\frac{5}{4}, \frac{1}{4}$

Solution:



v. $\frac{40}{29}, \frac{141}{29}$

Solution:

vi. $-\frac{17}{20}, -\frac{13}{20}$

Solution:

vii. $\frac{15}{12}, \frac{7}{16}$

Solution:



viii. $-\frac{25}{8}, -\frac{9}{4}$

Solution:

ix. $\frac{12}{15}, \frac{3}{5}$

Solution:



x. $-\frac{7}{11}, -\frac{3}{4}$

Solution:

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Practice Set 1.3

1. Write the following rational numbers in decimal form.

i. $\frac{9}{37}$

Solution:

ii. $\frac{18}{42}$

Solution:

Handwriting practice lines consisting of a solid top line, a dashed middle line, and a solid bottom line, arranged in two columns.

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iii. $\frac{9}{14}$

Solution:

Handwriting practice area for problem iii, consisting of 20 horizontal dashed lines.

iv. $-\frac{103}{5}$

Solution:

Handwriting practice area for problem iv, consisting of 20 horizontal dashed lines.

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v. $-\frac{11}{13}$

Solution:

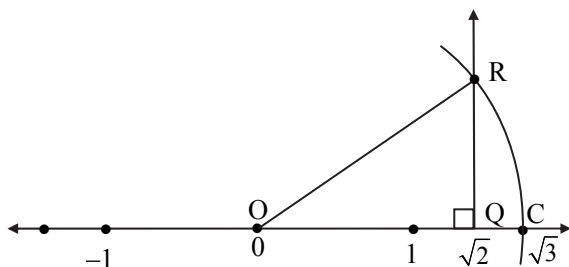
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Practice Set 1.4

1. The number $\sqrt{2}$ is shown on a number line. Steps are given to show $\sqrt{3}$ on the number line using $\sqrt{2}$. Fill in the boxes properly and complete the activity.

Activity:



The point Q on the number line shows the number .

A line perpendicular to the number line is drawn through the point Q. Point R is at unit distance from Q on the line.

Right angled ΔOQR is obtained by drawing seg OR.

$$l(OQ) = \sqrt{2}, l(QR) = 1$$

\therefore By Pythagoras theorem,

$$[l(OR)]^2 = [l(OQ)]^2 + [l(QR)]^2$$

$$= \boxed{}^2 + \boxed{}^2$$

$$= \boxed{} + \boxed{}$$

$$= \boxed{}$$

$$\therefore l(OR) = \boxed{}$$

Draw an arc with centre O and radius OR. Mark the point of intersection of the line and the arc as C. The point C shows the number $\sqrt{3}$.

2. Show the number $\sqrt{5}$ on the number line.

Solution:



3. Show the number $\sqrt{7}$ on the number line.

Solution:



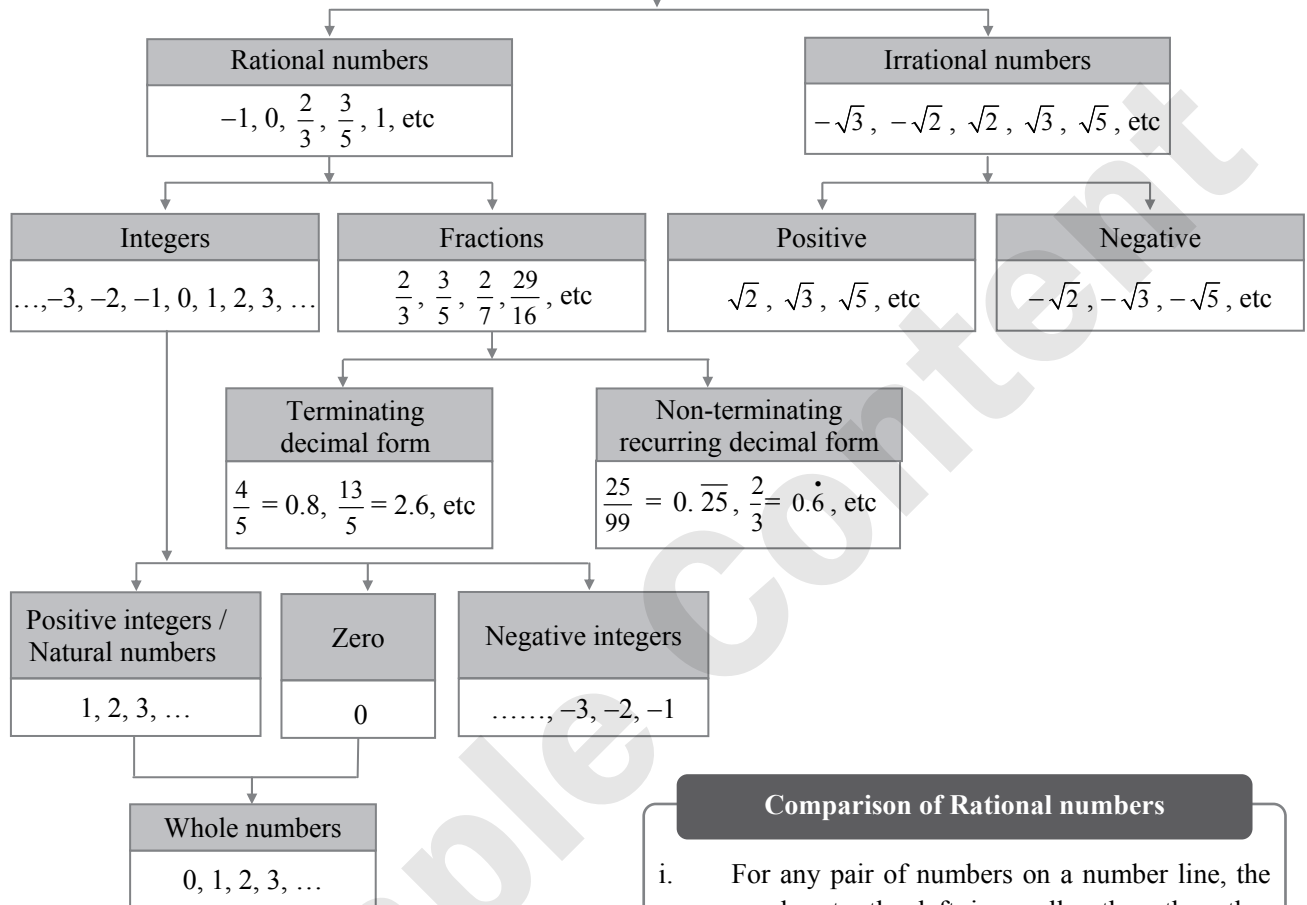
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Smart Recap

Real numbers

$-\sqrt{3}, -1, 0, 1, \sqrt{2}, \frac{3}{5}, 1, \text{etc}$



Rules to compare two rational numbers

If $\frac{a}{b}$ and $\frac{c}{d}$ are rational numbers such that b and d are positive, and if

- i. $a \times d < b \times c$, then $\frac{a}{b} < \frac{c}{d}$
- ii. $a \times d = b \times c$, then $\frac{a}{b} = \frac{c}{d}$
- iii. $a \times d > b \times c$, then $\frac{a}{b} > \frac{c}{d}$

Comparison of Rational numbers

- i. For any pair of numbers on a number line, the number to the left is smaller than the other number.
- ii. A negative number is always less than a positive number.
- iii. If the numerator and the denominator of a rational number is multiplied by any non zero number, then the value of rational number does not change i.e. $\frac{a}{b} = \frac{a \times k}{b \times k}$, ($k \neq 0$).
- iv. If the denominators of two rational numbers are the same, then the number having greater numerator is the greater rational number.
- v. If a and b are positive numbers such that $a < b$, then $-a > -b$.

Teacher's Remark:

Date:



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