

SSS Multipurpose Technical High School, Pantnagar, Ghatkopar (E)

First Unit Test 2020 – 21

Std.: - 8th subject: - Maths Marks: - 20 Time: - 1 Hrs. Date: - /09/2020

Name of the Student: -

Div.: -

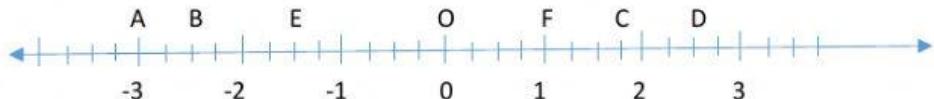
Q.1 Fill in the Boxes.

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1. $\frac{5}{3}, \frac{-3}{4}, \frac{7}{-2}, -\frac{1}{5}$ are ----- numbers.

a) Integers b) Natural c) Rational d) Whole

2. From the number line given below, which number is indicated by point E?



a) $\frac{-6}{4}$ b) $\frac{6}{4}$ c) $\frac{-3}{4}$ d) $\frac{8}{4}$

3. Compare the numbers. 0 $\frac{-9}{5}$

a) < b) > c) = d) Can't say.

4. Index form of " Fifth root of 15 " = -----

a) $(15)^{\frac{1}{5}}$ b) $(51)^5$ c) $(15)^{\frac{5}{1}}$ d) $(51)^{\frac{1}{5}}$

Q.2 Match the following.

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Group A

Group B

1. $(49)^{\frac{1}{7}}$	i) Square root of 49
2. $(49)^{\frac{1}{2}}$	ii) Cube root of 49
3. $(49)^{\frac{6}{7}}$	iii) Seventh root of 49
4. $(49)^{\frac{1}{3}}$	iv) Sixth power of Seventh root of 49

Q.3 Solve the following questions.

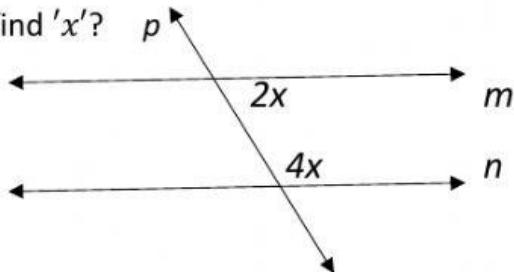
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1. Write $\frac{-13}{11}$ number in decimal form.

$$\begin{array}{r} 13 \\ 11) \overline{13} \\ -11 \\ \hline 020 \\ -11 \\ \hline 090 \\ -88 \\ \hline 20 \end{array}$$
$$\therefore \frac{-13}{11} = 2.0$$

2. In the figure given below, if line $m \parallel$ line n , and line p

is a transversal, then find ' x '?



Here, line $m \parallel$ line n , and line p is a transversal

And given angles '2x' and '4x' are interior angles.

\therefore by property of interior angles,

$$2x + 4x = 180^\circ$$

$$\therefore 6x = 180^\circ$$

$$\therefore x =$$

$$\therefore x =$$

3. Find the cube of 0.03.

$$(0.03)^3 =$$

(Multiplication form)

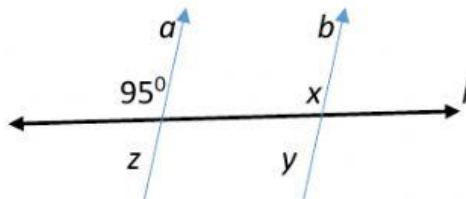
$$(0.03)^3 =$$

(Answer)

Q.4 Solve the following questions.

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1. In the figure given below, line $a \parallel$ line b , and line l is a transversal, find the measures of $\angle x$, $\angle y$ and $\angle z$ using the given information.



i) $\angle x = ?$

a) 95° b) 85° c) 100° d) 180°

ii) $\angle y = ?$

a) 95° b) 85° c) 100° d) 180°

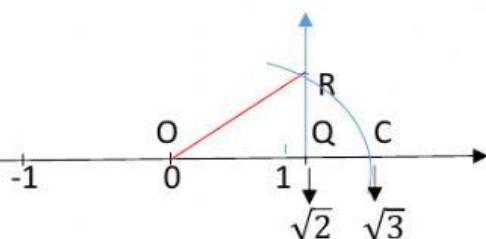
iii) $\angle z = ?$

a) 95° b) 85° c) 100° d) 180°

2. 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 :

1. The point Q on the number line shows the number $\sqrt{2}$
2. 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 ΔORQ is obtained by drawing seg OR.
3. Right angled ΔORQ is obtained by drawing seg OR.



$$4. l(OQ) = \sqrt{2}, l(QR) = 1$$

\therefore by Pythagorus theorem,

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