INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics ***Worksheet- Rational Numbers***

15-04-20

OBJECTIVE TYPE (1 Mark)

Q.1.	The multiplicative inverse of $1\frac{3}{7}$							
	A	$\frac{-7}{10}$	**B**	$\frac{7}{10}$	**C**	$\frac{10}{7}$	**D**	$\frac{-10}{7}$
Q.2.	The additive inverse of $\frac{-5}{-6}$							
	A	$\frac{-5}{6}$	**B**	$\frac{5}{6}$	**C**	$\frac{-6}{5}$	**D**	$\frac{6}{5}$
Q.3.	Name the property used: $\frac{-3}{7}\times\frac{4}{5}=\frac{4}{5}\times\frac{-3}{7}$							
	A	Associative	**B**	Distributive	**C**	Closure	**D**	Commutative
Q.4.	The additive identity for addition of rational numbers is							
	A	1	**B**	-1	**C**	0	**D**	The number itself
Q.5.	Name the property illustrated: $\frac{-33}{25}\times 1=\frac{-33}{25}$							
	A	1 is the multiplicative identity	**B**	1 is the additive identity	**C**	Commutative	**D**	None of these
Q.6.	Identify the rational number that lies between $\frac{-2}{5}$ and $\frac{-3}{5}$							
	A	$-\frac{4}{10}$	**B**	$-\frac{3}{10}$	**C**	$-\frac{5}{10}$	**D**	$-\frac{2}{10}$
Q.7.	Name the property used: $\frac{3}{7}\times\left(\frac{3}{4}-\frac{4}{5}\right)=\frac{3}{7}\times\frac{3}{4}-\frac{3}{7}\times\frac{4}{5}$							
	A	Associative	**B**	Distributive	**C**	Multiplicative identity	**D**	Additive identity

Q.8.	A rational number between $\frac{-1}{2}$ and $\frac{1}{2}$ is							
	A	0	**B**	2	**C**	1	**D**	-1
Q.9.	The multiplicative identity for rational numbers is							
	A	2	**B**	0	**C**	1	**D**	None of these
Q.10.	The multiplicative inverse of $\frac{3}{10} + \left(\frac{-2}{5}\right)$							
	A	-5	**B**	$\frac{7}{10}$	**C**	$\frac{5}{10}$	**D**	-10

	Fill in the blanks(1mark)
Q.11.	The property that allows to compute $\frac{1}{3} \times (6 \times \frac{-2}{11})$ as $(\frac{1}{3} \times 6) \times \frac{-2}{11}$ is .....
Q.12.	The multiplicative inverse of $4\frac{1}{3}$ is .....
Q.13.	The number of rational numbers between -6 and -5 is .....
Q.14.	The rational number that is equal to its negative is .....
Q.15.	Zero has ------ reciprocal.
	SECTION B (2 marks)
Q.16.	Find the additive inverse of $\left(\frac{4}{8} \times \frac{1}{7}\right) + \left(\frac{3}{8} \times \frac{1}{7}\right)$.
Q.17.	Use distributive property to find the value of $\frac{-8}{17} \times \frac{-5}{6} + \frac{3}{7} \times \frac{-8}{17}$.
Q.18.	Find the product of $\frac{13}{15}$ and additive inverse of $\frac{-5}{26}$.
Q.19.	Verify that $-(-y) = y$ for $y = \frac{-7}{25}$.
Q.20.	Is $\frac{6}{13}$ the multiplicative inverse of $2\frac{1}{6}$? Why or why not?
	SECTION C (4 marks)
Q.21.	Insert 6 rational numbers between $\frac{-2}{7}$ and $\frac{-3}{11}$.

Q.22.	Verify $\frac{1}{7} \times \{\frac{-3}{5} + \frac{6}{7}\} = [\frac{1}{7} \times \frac{-3}{5}] + [\frac{1}{7} \times \frac{6}{7}]$
Q.23.	Use appropriate properties to find the value of $\frac{-2}{3} \times \frac{4}{5} + \frac{7}{10} + \frac{4}{5} \times \frac{-1}{6}$ also mention the property used in bracket.
Q.24.	Draw a single number line to represent the following sets of rational numbers on it. $\frac{-2}{9}, \frac{-5}{9}, \frac{-7}{9}, 0, 1, \frac{4}{9}$
Q.25.	Insert 6 rational numbers between $-\frac{3}{2}$ and $-\frac{7}{5}$

Answers

Answers	**1**	B	**2**	A	**3.**	D	**4**	C
	5	A	**6**	C	**7**	B	**8**	A
	9	C	**10**	D	**11**	Associative property	**12**	$\frac{3}{13}$
	13	Infinite	**14**	1 and (-1)	**15**	No	**16**	$\frac{-1}{8}$
	17	$\frac{4}{21}$	**18**	$\frac{1}{6}$	**20**	Yes	**23**	$\frac{1}{30}$

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