

INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics Worksheet- RATIONAL NUMBERS

25-04-2021

OBJECTIVE TYPE (1 Mark)									
Q.1.	Which pair of the following numbers are respectively the additive and multiplicative identities?								
	A	2 and 0	В	1 and -1	С	-1 and 0	D	0 and 1	
Q.2.	Which of the following properties indicates the given operations? $\left[\left(\frac{-1}{5}\right) + \left(\frac{-3}{5}\right)\right] + \left(\frac{1}{7}\right) = \left(\frac{-1}{5}\right) + \left[\left(\frac{-3}{5}\right) + \left(\frac{1}{7}\right)\right]$								
	A	Commutative	В	Associative	С	Distributive	D	Additive identity	
Q.3.	What is the sum of the additive inverse and multiplicative inverse of 2?								
	A	$\frac{3}{2}$	В	$\frac{-3}{2}$	С	$\frac{1}{2}$	D	$\frac{-1}{2}$	
Q.4.	To get the product 1, we should multiply $\frac{8}{21}$ by								
	Α	<u>8</u> 21	В	$\frac{-8}{21}$	C	21 8	D	$\frac{-21}{8}$	
Q.5.	Which of the following statements is true?								
	A	Every fraction is a rational number	В	Every rational number is a fraction	С	Every integer is a rational number	D	Both (A) and (C)	
Q.6.	The multiplicative inverse of $-1\frac{1}{7}$ is								
	A	<u>8</u> 7	B	$\frac{-8}{7}$	С	<u>7</u> 8	D	$\frac{7}{-8}$	
Q.7.	-(-x) is same as								
	Α	(-x)	В	(<i>x</i>)	C	$\frac{1}{x}$	D	$\frac{1}{-x}$	

Q.8.	The reciprocal of $\frac{-3}{8} \times \frac{-7}{13}$ is								
	A	$\frac{104}{21}$	В	$\frac{-104}{21}$	С	$\frac{21}{104}$	D	$\frac{-21}{104}$	
Q.9.	Between two given rational numbers we can find:								
	A	One and only one rational number	В	Only two rational numbers	С	Infinitely many rational numbers	D	Only 10 rational numbers	
Q.10	The additive inverse of $-1\frac{1}{7}$ is								
	A	$\frac{8}{7}$	B	$\frac{-8}{7}$	С	<u>7</u> 8	D	$\frac{7}{-8}$	
Q.11	Zero is								
	A	The identity for addition of Rational numbers	B	The identity for subtraction of Rational numbers	С	The identity for multiplication of Rational numbers	D	The identity for division of Rational numbers	
Q.12	The rational number equivalent to $\frac{-24}{45}$ is								
	A	$\frac{12}{20}$	B	$\frac{-8}{15}$	С	$\frac{-6}{9}$	D	$\frac{4}{11}$	
Q.13	Which one of the following is the rational number between $\frac{6}{7}$ and $\frac{7}{8}$?								
	A	$\frac{3}{4}$	B	<u>99</u> 112	С	<u>95</u> 112	D	<u>97</u> 112	
	Fill in the blanks by stating the property used in each of the following: (Q. $14 - Q = 16$)								
Q.14	$\frac{2}{5} \times \frac{3}{7} = \frac{3}{7} \times \frac{2}{5}$								
Q.15	$\frac{-4}{7}$ ×	$\frac{-4}{7} \times 1 = 1 \times \frac{-4}{7} = \frac{-4}{7}$							
Q.16	$\frac{1}{5} \times \left[\frac{5}{6} \times \frac{7}{9}\right] = \left[\frac{1}{5} \times \frac{5}{6}\right] \times \frac{7}{9}$								
	State True or False: $(Q. 17 - Q 20)$								
Q.17	The sum of two rational numbers is -7 . If one of them is $\frac{-11}{5}$, then the other is $\frac{-24}{5}$.								
Q.18	$\frac{4}{3} \div \frac{9}{5} = \frac{20}{27}$								

Q.19	1 is the only number which is its own reciprocal.								
Q.20	Zero has no reciprocal								
	CASE STUDY: Ramesh had invited four of his friends for his birthday party. They decided to play the game "Pass and Pick". Inside the parcel as shown in the figure, there were equal sized cards with rational numbers marked on them. $\boxed{-\frac{2}{3} + \frac{-8}{15}} = \frac{-1}{-5}$								
Q.21	The largest rational number among the above given rational numbers is								
	А	$\frac{-2}{3}$	В	$\frac{5}{-9}$	С	$\frac{-8}{15}$	D	$\frac{-1}{-5}$	
Q.22	The sum of $\frac{-2}{3} + \frac{5}{-9}$ is								
	Α	$\frac{9}{11}$	B	$\frac{-11}{9}$	С	$\frac{3}{2}$	D	$\frac{1}{2}$	
Q.23	The product of $\frac{5}{-9} \times \frac{-8}{15}$ is								
	Α	$\frac{8}{27}$	В	$\frac{-8}{135}$	С	$\frac{13}{6}$	D	8 15	
Q.24	$\frac{-2}{3} \times \left(\frac{5}{-9} + \frac{-8}{15}\right)$ is								
	Α	<u>89</u> 135	В	<u>-89</u> 135	С	<u>98</u> 135	D	<u>-98</u> 135	
Q.25	Arrange the given rational numbers in descending order.								
	A	$\frac{-8}{15}, \frac{5}{-9}, \frac{-2}{3}, \frac{-1}{-5}$	В	$\frac{5}{-9}, \frac{-2}{3}, \frac{-1}{-5}, \frac{-8}{15}$	С	$\frac{-1}{-5}, \frac{-8}{15}, \frac{5}{-9}, \frac{-2}{3}$	D	$\frac{-2}{3}, \frac{-8}{15}, \frac{-1}{-5}, \frac{5}{-9}$	

Answers									
	1	D	2	В	3.	В	4	С	
	5	D	6	D	7	В	8	А	
	9	С	10	А	11	А	12	В	
Answers	13	D	14	Commutative property of multiplication	15	Multiplicative identity	16	Associative property of multiplication	
	17	True	18	True	19	False	20	True	
	21	D	22	В	23	Α	24	С	
	25	С							
