

Rational Number Worksheet - 4

1. The rational numbers $\frac{1}{3}$ and $-\frac{3}{2}$ are on the opposite side of zero on the number line. Mark True / False.

- a) True b) False

2. Which property allow to calculate $\frac{1}{6} \times \left[\frac{5}{7} \times \frac{7}{9} \right]$ as $\left[\frac{1}{6} \times \frac{5}{7} \right] \times \frac{7}{9}$.

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|----|-------------|----|--------------|
| a) | Associative | b) | Distributive |
| c) | Commutative | c) | Both A and C |

3. Simplify $-7 + \frac{9}{10} + \frac{3}{7} + (-5) + \frac{5}{11} + (-\frac{6}{5})$ by necessary arrangement.

- a) $^{323}_{770}$ b) -11^{321}_{770}
c) 11^{232}_{770} d) None of these

4. Simplify $\frac{3}{5} \times \left[\frac{10}{9} - 40 \right]$ by using distributive of multiplication of rational numbers over addition.

- a) -6
- b) $\frac{19}{45}$
- c) $-23\frac{1}{3}$
- d) $\frac{9}{5}$

5. Arrange the number $\frac{1}{5}, \frac{13}{15}, \frac{3}{20}$ in descending order.

- a) $1/5, 13/15, 3/20$ b) $3/20, 1/5, 13/15$
c) $13/15, 1/5, 3/20$ d) $13/15, 3/20, 1/5$

6. The product of two rational numbers is $-\frac{17}{21}$. If one of the numbers be $\frac{9}{7}$, then find the other number.

- a) $-27/17$
- b) $27/7$
- c) $-17/9$
- d) $-17/27$

7. Find the multiplicative inverse of $4\frac{2}{5}$.

- a) $\frac{22}{5}$
c) $\frac{5}{22}$
- b) $-\frac{5}{22}$
d) $-\frac{22}{5}$

8. 50m rope is cut into pieces of equal size. If the length of one piece is $10\frac{1}{4}$ m, find the number of such pieces.

- [illegible]

9. By what numbers should we multiply -39 , so that the product may be 24 ?

- | | |
|--------------------|-------------------|
| a) $-\frac{8}{13}$ | b) $\frac{13}{8}$ |
| c) $-\frac{2}{13}$ | d) $-\frac{3}{8}$ |

10. Write a rational number whose multiplicative inverse -1 ?

- | | |
|--------|-------------------|
| a) 1 | b) -1 |
| c) 0 | d) Does not exist |

11. Find the sum of additive inverse and multiplicative inverse of $\frac{7}{11}$.

- | | |
|----------------------|---------------------|
| a) $\frac{11}{7}$ | b) $-\frac{72}{77}$ |
| c) $-\frac{170}{77}$ | d) $-\frac{77}{11}$ |

12. For any rational number A , $A + (-1) = -A$. Mark True/False

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|----------|---------|
| a) False | b) True |
|----------|---------|

13. For every rational number A , $A \times 0 = A$. Mark True/False.

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|---------|----------|
| a) True | b) False |
|---------|----------|

14. If $\frac{A}{B}$ is additive inverse of $\frac{C}{D}$, then $\frac{A}{B} - \frac{C}{D} = 0$. Mark True / False.

- | | |
|----------|---------|
| a) False | b) True |
|----------|---------|

15. The rational number 10.123 in the form of $\frac{a}{b}$ is ____.

- | | |
|------------------------|-------------------------|
| a) $\frac{10}{123}$ | b) $\frac{123}{100}$ |
| c) $\frac{10123}{100}$ | d) $\frac{10123}{1000}$ |

16. The rational numbers $\frac{1}{4}$ and $-\frac{1}{4}$ are on the ____ side of zero on the number line.

- | | |
|-------------|------------------|
| a) Same | b) Both |
| c) Opposite | d) None of these |

17. The equivalent rational number of $\frac{8}{9}$ whose denominator is 36 is ____.

- | | |
|--------------------|--------------------|
| a) $\frac{36}{32}$ | b) $\frac{32}{36}$ |
| c) $\frac{9}{8}$ | d) $\frac{8}{36}$ |

18. The equivalent of $\frac{4}{7}$ whose numerator is 20 , is ____.

- | | |
|--------------------|--------------------|
| a) $\frac{20}{35}$ | b) $\frac{20}{23}$ |
| c) $\frac{20}{40}$ | d) None of these |

19. Write the greater number between $\frac{8}{21}$ and $\frac{2}{63}$.

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|----|----------------|----|---------------|
| a) | $\frac{2}{63}$ | b) | Both same |
| c) | $\frac{8}{21}$ | d) | None of these |

20. A window curtain is $30\frac{1}{5}$ cm long has a hem of $2\frac{4}{5}$ cm. How long will the curtain be if the hem is let down?

- | | | | |
|----|-------|----|----------|
| a) | 31 cm | b) | 33.24 cm |
| c) | 42 cm | d) | 33 cm |