

MATHS

BOOKS - VGS PUBLICATION-BRILLIANT

RATIONAL NUMBER

Exercise

1. Hamid says $\frac{5}{3}$ is a rational number and 5 is only a natural number. Shikha says both are rational numbers. With whom do you agree?

2. Give one example each to the following statements.

iv. A number which is natural number, whole number, integer and rational number.



3. Give one example each to the following statements.

ii. A whole number which is not a natural number



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4. Give an example to satisfy the following statements : All integers are rational numbers but all rational numbers need not be integers.



5.
$$\frac{9}{10} + \left(-\frac{13}{8}\right)$$



6. The Value of
$$1\frac{3}{5}+4\frac{2}{7}=$$



7. The Value of
$$\frac{-7}{16} - \left(\frac{-9}{20}\right) =$$



8.
$$\frac{-11}{14} - \left(\frac{1}{21}\right)$$

9. Find the additive inverse of the following numbers :
$$\frac{-7}{6}$$
, $\frac{1}{10}$, $\frac{-3}{4}$, 8



10.
$$\frac{18}{11} imes \frac{-33}{45}$$





12.
$$\frac{-105}{72} imes \frac{18}{15}$$



13. The value of
$$\frac{13}{120} imes \frac{100}{16} =$$

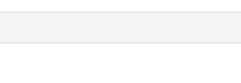




15. The Value of
$$\frac{18}{25} \div \left(\frac{-72}{75}\right) =$$

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16. The Value of $\frac{-125}{64} \div \frac{50}{16} =$



17. Divide $\frac{-512}{441}$ with $\frac{-1024}{21}$

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18. If we exclude zero from the set of integers. then is it closed under division?



19. If a property holds good with respect to addition for rational numbers, whether it holds good for integers? And for whole numbers? Which one holds good and which doesn't hold good?



20. Write the numbers whose multiplicative inverses are the numbers themselves.



21. Can you find the reciprocal of '0' (zero)? Is there any rational numbers such that when it is multiplied by '0' gives '1'?



22. Find using distributivity

$$\left\{rac{7}{5} imes\left(rac{-3}{10}
ight)
ight\}+\left\{rac{7}{5} imesrac{9}{10}
ight\}$$



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23. Find using distributivity

$$\left\{rac{9}{16} imes 3
ight\}+\left\{rac{9}{16} imes (\,-\,19)
ight\}$$

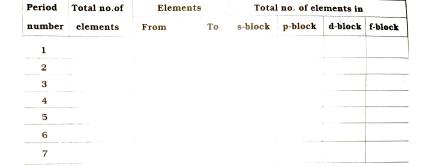


24. Complete the following table using the periodic table .

	Total no.of elements	Elements		Total no. of elements in			
		From	То	s-block	p-block	d-block	f-block
1							
2	1						
3	1						
4							
5						a	
6						-	
7							



25. Complete the following table using the periodic table .





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26. Simplify
$$\frac{2}{5} + \frac{3}{7} + \left(\frac{-6}{5}\right) + \left(\frac{-13}{7}\right)$$



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27. Write the additive inverses of each of the following rational numbers : $\frac{2}{7}$



28. Write the additive inverses of each of the following rational numbers : $\frac{-11}{5}$



29. Write the additive inverses of each of the following rational numbers : $\frac{7}{-13}$



30. Write the additive inverses of each of the following rational numbers: $\frac{2}{3}$



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31.
$$\frac{2}{5} \times \left(\frac{-1}{9}\right) + \frac{23}{180} - \frac{1}{9} \times \frac{3}{4} =$$



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32. Multiply the reciprocals of $\frac{-9}{2}$, $\frac{5}{18}$ and add the additive inverse of $\left(\frac{-4}{5}\right)$ to the product. What is the result?

33. Name the property involved in the following

examples :
$$\frac{8}{5} + 0 = \frac{8}{5} = 0 + \frac{8}{5}$$



34. Name the property involved in the following

$$\operatorname{examples}: 2\bigg(\frac{3}{5} + \frac{1}{2}\bigg) = 2\bigg(\frac{3}{5}\bigg) + 2\bigg(\frac{1}{2}\bigg)$$



35. Name the property involved in the following

examples :
$$\frac{3}{7} imes 1 = \frac{3}{7} = 1 imes \frac{3}{7}$$



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36. Name the property involved in the following

examples :
$$\left(\dfrac{-2}{5} \right) imes 1 = \dfrac{-2}{5} = 1 imes \left(\dfrac{-2}{5} \right)$$



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37. Name the property involved in the following examples : $\frac{2}{5} + \frac{1}{3} = \frac{1}{3} + \frac{2}{5}$

38. Name the property involved in the following examples : $\frac{5}{2} \times \frac{3}{7} = \frac{15}{14}$



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39. Name the property involved in the following

examples :
$$7a + (-7a) = 0$$



40. Name the property involved in the following examples : $x imes rac{1}{x} = 1 (x
eq 0)$



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41. Name the property involved in the following

examples : $(2 \times x) + (2 \times 6) = 2 \times (x + 6)$



42. Write the additive and the multiplicative inverses of the following: $\frac{-3}{5}$



43. Write the additive and the multiplicative inverses of the following: 1



44. Write the additive and the multiplicative inverses of the following : 0



45. Write the additive and the multiplicative inverses of the following : $\frac{7}{9}$



46. Write the additive and the multiplicative inverses of the following: -1



47. Fill in the Blanks
$$\left(\frac{-1}{17}\right) + \left(\frac{-1}{17}\right) = \left(\frac{-12}{5}\right) + \left(\frac{-1}{17}\right)$$



48. Fill in the Blanks :
$$\frac{-2}{3} +_{-} = \frac{-2}{3}$$



49. Fill in the Blanks :
$$1 \times_{-} = \frac{9}{11}$$



- **50.** Fill in the Blanks : $-12+\left(rac{5}{6}+rac{6}{7}
 ight)=\left(\,-\,12+rac{5}{6}\,
 ight)-\left(\,_{--}\,_{-}\,_{-}
 ight)$
 - - Watch Video Solution

- $\left(\begin{array}{c} 1 \end{array} \right) imes \left(rac{1}{2} + rac{1}{3}
 ight) = \left(rac{3}{4} imes rac{1}{2}
 ight) + \left(rac{3}{4} imes_-
 ight)$
 - - Watch Video Solution

- **52.** Fill in the Blanks : $\frac{-16}{7} +_{-} = \frac{-16}{7}$

51. Fill in the Blanks



53. Multiply
$$\frac{2}{11}$$
 by the reciprocal of $\frac{-5}{14}$



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54. Which properties can be used in computing

$$\left[rac{2}{5} imes\left[5 imesrac{7}{6}
ight]+rac{1}{3} imes\left(3 imesrac{4}{11}
ight)$$
 ?



55. Verify the following and write the property used

$$\left(rac{5}{4}+rac{-1}{2}
ight)+rac{-3}{2}=rac{5}{4}+\left(rac{-1}{2}+rac{-3}{2}
ight)$$



56. Evaluate $\frac{3}{5} + \frac{7}{3} + \left(\frac{-2}{5}\right) + \left(\frac{-2}{3}\right)$ after rearrangement.



57. Subtract $\frac{3}{4}$ from $\frac{1}{3}$



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58. Subtract $\frac{-32}{13}$ from 2



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59. Subtract - 7 from $\frac{-4}{7}$



60. What number should be added to $\frac{-5}{8}$ so as to get $\frac{-3}{2}$?



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61. The sum of two rational is 8. If one of the number is $\frac{-5}{6}$ find the other



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62. Is subtraction associative in rational numbers? Explain with an example.



63. Verify that
$$-(-x)=x$$
 for $x=rac{2}{15}$



64. Verify that
$$-(-x) = x$$
 for $x = \frac{-13}{17}$



65. Write the set of number which do not have any additive identity.



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66. Write the rational number that does not have any reciprocal.



67. Write the reciprocal of a negative rational number.



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68. Represent $\frac{5}{8}$ on the number line.



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69. Represent $\frac{29}{6}$ on the number line.



70. Represent $-\frac{13}{5}$ on the number line.



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71. Write any five rational numbers between -3 and 0.



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72. Represent these number on the number line

 $\frac{9}{7}$



73. Represent these number on the number line

$$\frac{-7}{5}$$



74. Represent $-\frac{2}{13}$, $-\frac{5}{13}$, $-\frac{9}{13}$ on the number line.



75. Write five rational numbers which are smaller that $\frac{5}{6}$



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76. Find 12 rational numbers between -1 and 2



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77. Find a rational numbers between $\frac{2}{3}$ and $\frac{3}{4}$ [Hint: First write the rational numbers with equal denominators.]

78. Find ten rational numbers between
$$-\frac{3}{4}$$
 and $\underline{5}$



79. Express the following in decimal form.

$$\frac{7}{5}, \frac{3}{4}, \frac{23}{10}, \frac{5}{3}, \frac{17}{6}, \frac{22}{7}$$



80.

Express the following in decimal form.

 $\frac{7}{5}$, $\frac{3}{4}$, $\frac{23}{10}$, $\frac{5}{3}$, $\frac{17}{6}$, $\frac{22}{7}$

Which of the above are terminating and which are non-terminating decimals?



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81.

Express the following in decimal form. $\frac{7}{5}$, $\frac{3}{4}$, $\frac{23}{10}$, $\frac{5}{3}$, $\frac{17}{6}$, $\frac{22}{7}$

Write the denominators of above rational numbers as the product of primes.

82. If the denominators of the above simplest rational numbers has no prime divisors other than 2 and 5 what do you observe?



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83. Express each of the following decimals in the

$$\frac{p}{q}$$
 form 0.35



84. Express each of the following decimals in the $\frac{p}{q}$ form -8.005



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85. Express each of the following decimals in the

$$\frac{p}{q}$$
 form 2.104



86. Express each of the following decimals numbers in the rational from $0.\overline{4}$



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87. Express each of the following decimals numbers in the rational from $0.\overline{54}$



88. Express each of the following decimals numbers in the rational from 4.7



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89. Express the mixed recurring decimal $15.7\overline{32}$ in $\frac{p}{q}$ form.



90. Convert the decimals $0.\ \bar{9},\ 14.\ \bar{5}$ and $1.2\bar{4}$ to the rational form. Can you find any easy method other than forma method?



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91. Express each of the following decimal in the

 $\frac{p}{}$ form 0.57



92. Express each of the following decimal in the

$$\frac{p}{a}$$
 form 0.176



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93. Express each of the following decimal in the

$$\frac{p}{a}$$
 form 1.00001



94. Express each of the following decimal in the

$$\frac{p}{a}$$
 form 25.125



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95. Express each of the following decimals in the rational form $\left(\frac{p}{q}\right)0.\ \bar{9}$



96. Express each of the following decimals in the rational form $\left(\frac{p}{q}\right)$. $0.\overline{57}$



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97. Express each of the following decimals in the rational form $\left(\frac{p}{a}\right)$. $0.7\overline{29}$



98. Express each of the following decimals in the rational form $\left(\frac{p}{q}\right)$. $12.2\bar{8}$



99. Find
$$(x+y)\div(x-y)$$
 if $x=rac{5}{2},y=-rac{3}{4}$





101. Divide the sum of $-\frac{13}{5}$ and $\frac{12}{7}$ by the product of $-\frac{13}{7}$ and $-\frac{1}{2}$.



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102. If $\frac{2}{5}$ number exceeds $\frac{1}{7}$ of the same number by 36. Find the number.



103. Two pieces of lengths $2\frac{3}{5}m$ and $3\frac{3}{10}m$ are cut from a rope 11 m long. What is the length of the remaining rope?



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104. The cost of $7\frac{2}{3}$ metres of cloth is $\neq 12\frac{3}{4}$ Find the cost per metre.



105. Find the area of a rectangular park which is $18\frac{3}{5}m$ long and $8\frac{2}{3}m$ broad.



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106. What number should $-\frac{33}{16}$ be divided by to get $-\frac{11}{4}$?



107. If 36 trousers of equal sizes can be stitched with 64 metres of cloth. What is the length of the cloth required for each trousers?



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108. When the repeating decimal 10.363636.... is written in simplest fractional from $\frac{p}{q}$, find the sum p+q.



109. Which of the following is not a rational number?

A. 1

B. 1. $\bar{3}$

 $\mathsf{C.}\,\sqrt{5}$

D. $\sqrt{9}$

Answer:



110. Which of the following is true?

A.
$$N\subset W\subset Q\subset Z$$

$$\operatorname{B.} N \subset Z \subset W \subset Q$$

$$\mathsf{C}.\,W\subset N\subset N\subset \mathsf{Z}$$

$$\operatorname{D.} N \subset W \subset Z \subset Q$$

Answer:



111. Set of rational numbers under addition which of the following properties is hold?

- A. Closure
- **B.** Associative
- C. Commutative
- D. All the above

Answer:



112. Set of rational numbers is not hold which of the following with respect to. closure property?

- A. Addition
- B. Subtraction
- C. Multiplication
- D. Division

Answer:



113. Which of the following is an additive identity?

A. 0

B. 1

C. 2

D. -1

Answer:



114. Which of the following is a multiplicative identity element?

- A. 0
- B. 1
- C. 2
- D. -1

Answer:



115. Which of the following is a multiplicative inverse $-\frac{3}{4}$?

- A. 1
- $\mathsf{B.}\;\frac{3}{4}$
- $\mathsf{C.}\,\frac{4}{3}$
- D. $\frac{-4}{3}$

Answer:



116. What is the additive inverse of $\frac{5}{6}$?

A.
$$\frac{-5}{6}$$

$$\mathsf{B.}\,\frac{-6}{5}$$

$$\mathsf{C.}\,\frac{6}{5}$$

D. 0

Answer:



117. Which of the following is commutative property under multiplication ?

A.
$$a \times b = c$$

B.
$$a \times b = b \times a$$

C.
$$a imes (b imes c) = (a imes b) imes c$$

D.
$$a \times (b+c) = ab + ac$$

Answer:



118. Which of the following is a multiplicative distributive property over addition?

A.
$$\frac{2}{3} imes \frac{1}{5}=\frac{2}{15}$$

$$B.2 + 3 = 3 + 2$$

$$\mathsf{C.}\,2\times(3\times4)=(2\times3)\times4$$

D.
$$2 \times (3+4) = (2 \times 3) + (2 \times 4)$$
.

Answer:



119. Which of the following is not true?

A. Every natural number is a whole number

B. Every whole number is an integer

C. Every rational number is an integer

D. Every whole number is a rational number

Answer:



B. 1

$$\mathsf{C.}\,\frac{8}{7}$$

D.
$$\frac{7}{8}$$

Answer:



121.
$$\left(-\frac{1}{2}\right)$$
 +___ =0

$$\mathsf{A.}\;\frac{1}{2}$$

$$\mathsf{C.}-\left(rac{1}{2}
ight)$$

D. 2

Answer:



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122. The product of multiplicative inverses of

$$\left(-\frac{9}{2}\right)$$
 and $\frac{5}{18}$ is?

A.
$$\frac{5}{4}$$

$$\mathsf{B.} - \left(\frac{5}{4}\right)$$

$$\mathsf{C.}\,\frac{4}{5}$$

$$\mathsf{D.} - \left(\frac{4}{5}\right)$$



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123. has no multiplication inverse.

A. 0

B. 1

$$\mathsf{D.}\,\frac{6}{7}$$



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124. Which of the following is a non terminating repeating decimal?

A.
$$\frac{22}{7}$$

B. 1.3

c.
$$\frac{20}{3}$$

D.
$$\frac{6}{5}$$



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125. Problem solving : $\frac{p}{q}$ form of 0.35 is

A.
$$\frac{16}{7}$$

$$\frac{35}{100}$$

C.
$$\frac{0.35}{100}$$

D.
$$\frac{35}{1000}$$



126. The
$$\frac{p}{q}$$
 form of 4. $(\bar{7})$ is _____

A.
$$\frac{33}{8}$$

$$\mathsf{B.}\;\frac{43}{9}$$

c.
$$\frac{4}{9}$$

D.
$$\frac{10}{7}$$



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127. If we write $0.\ ar{4}$ in $\dfrac{p}{q}$ from the value of p+q

is ___

A. 14

B. -9

C. 10

D. 13



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128. The
$$\frac{p}{q}$$
 form of -8.005 is____

A.
$$-\frac{1601}{200}$$

$$\mathsf{B.} \; \frac{-701}{40}$$

c.
$$\frac{-812}{117}$$

D.
$$\frac{-314}{819}$$

Answer:

129. Periodicity of 1. $(\overline{25})$ is ___

A. 5

B. 25

C. 2

D. 3

Answer:



130. Period of 1. $(\overline{156})$ is____

A. 156

B. 15.6

C. 1.56

D. 15600

Answer:



A. 2.
$$\bar{1}$$

B. 1.
$$\bar{8}$$

C. 1.
$$\bar{5}$$

D. 1.
$$\bar{6}$$



$$132. \left(-\left(-\frac{-2}{3}\right)\right) = \underline{\hspace{1cm}}$$

$$\overline{3}$$

$$\mathsf{B.}\,\frac{2}{3}$$

c.
$$\frac{3}{2}$$

D. $\frac{1}{2}$

__

Answer:

133.
$$\frac{8}{5} + 0 = 0 + \frac{8}{5} =$$

A.
$$\frac{6}{3}$$

$$\mathsf{B.}\;\frac{5}{7}$$

c.
$$\frac{8}{5}$$

D.
$$\frac{1}{5}$$



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134.
$$\frac{2}{5} \times \left(\frac{-1}{9}\right) + \frac{23}{180} - \frac{1}{9} \times \frac{3}{4} =$$

A. 3

B. 0

C. 10

D. 16

Answer:



135.
$$\frac{2}{5} + \frac{3}{7} - \frac{6}{5} - \frac{13}{7} =$$

A.
$$\frac{-8}{5}$$

$$\operatorname{B.}\frac{-7}{3}$$

$$\mathsf{C.}\,\frac{-78}{35}$$

D.
$$\frac{76}{35}$$



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136.
$$1 \times x_{---} = \frac{91}{11}$$

A.
$$\frac{9}{11}$$

B.
$$\frac{91}{11}$$

c.
$$\frac{9}{1121}$$

D.
$$\frac{11}{91}$$

Answer:

137.
$$2 < \frac{17}{8} < \frac{9}{4} < K < 3, K = _$$

A.
$$\frac{1}{7}$$

$$\mathsf{B.}\;\frac{1}{2}$$

$$\mathsf{C.}\,\frac{2}{5}$$

$$\mathsf{D.}\,\frac{5}{2}$$



138.
$$\frac{10}{7} =$$



139.
$$\frac{1373}{100} = _{--}$$

A.
$$\frac{4}{63}$$

B.
$$\frac{60}{19}$$

$$\mathsf{C.}\ \frac{63}{4}$$

D.
$$\frac{6}{31}$$



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140. Express each of the following decimals in the rational form $\left(\frac{p}{q}\right)$. $0.\ \bar{9}$

B. 1

C. 1.9

D. 7.5

Answer:



141.
$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + - - - - - - 10$$
 times`=

- A. 6
- B. 5
- C. 20
- D. 4



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A. 2

142. $1 \div_{-} = \frac{1}{2}$

$$\mathsf{B.}\;\frac{1}{2}$$

_

Answer:

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A. 0

B. 2

C. 16

D. can't be determine

Answer:



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144. Which number is not a prime number nor a composite number ?

A. 16

B. 1

- C. 4
- D. 3



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145. The number of rational numbers between

16 and 17 is ___

A. 10

B. 4

C. 10

D. Infinite

Answer:



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146.
$$\frac{-3}{2} - \frac{1}{2} =$$

A. -4

B. 2

C. -2

D. 6

Answer:



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A. px-q

B. p-xq

C. xp-q

D. xp-xq



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148.
$$\frac{5}{9} - \frac{3}{4} =$$

$$\text{A.}\ \frac{-9}{10}$$

$$\mathsf{B.}\;\frac{1}{6}$$

$$\mathsf{C.}\,\frac{-7}{36}$$

$$\mathsf{D.}\,\frac{7}{3}$$

Answer:

149.
$$\frac{-2}{3} \div \frac{2}{3} =$$

A. 10

B. -1

C. 1

D. 0

Answer:



150. The multiplicative inverse of 1 is ___

A. 7

B. 3

C. 1

D. 10

Answer:



151. The product of two numbers is $\frac{-20}{9}$ and one of the numbers is 4 then the other number is __

A.
$$\frac{-1}{9}$$

$$\mathsf{B.}\;\frac{9}{5}$$

$$\mathsf{C.}\,\frac{5}{9}$$

$$\text{D.} \frac{-5}{9}$$

Answer:



152.
$$\frac{-16}{21} \div \frac{-4}{3} =$$

A.
$$\frac{4}{7}$$

B.
$$\frac{1}{7}$$

D.
$$\frac{2}{3}$$

153.
$$\frac{5}{12} \div x = \frac{-35}{18}$$

A.
$$\frac{-1}{2}$$

B.
$$\frac{-3}{14}$$

$$\mathsf{C.}\,\frac{3}{4}$$

$$\text{D.}\,\frac{-1}{7}$$



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154. Which of the following rational number is in standard form?

A.
$$\frac{26}{78}$$

B.
$$\frac{-9}{20}$$

C.
$$\frac{14}{12}$$

D.
$$\frac{-48}{16}$$



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155. If we subtract ___ from $\frac{-3}{4}$ we get $\frac{5}{6}$

A.
$$\frac{-1}{3}$$

B.
$$\frac{1}{12}$$

c.
$$\frac{-19}{12}$$

D.
$$\frac{9}{4}$$



156. Identify the bigger one among the following:
$$\frac{-4}{9}$$
, $\frac{-5}{12}$, $\frac{-7}{18}$, $\frac{-2}{3}$

A.
$$\frac{-7}{18}$$

B.
$$\frac{-5}{12}$$

c.
$$\frac{-2}{3}$$

D.
$$\frac{-4}{9}$$



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157. Kishore bought $5\frac{3}{4}$ kg apples and $4\frac{1}{2}$ kg oranges then find the total weight in kgs.

A.
$$3\frac{1}{3}$$
 kg

B.
$$10\frac{1}{4}$$
kg

$$\mathsf{C.}\,7\frac{1}{2}\mathsf{kg}$$

$$\mathsf{D.}\, 9\frac{1}{4}\;\mathsf{kg}$$



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158. Krishna read $\frac{1}{3}$ of a book in 1 hour. Then how much he will read in $3\frac{1}{3}$ hrs?

A.
$$\frac{16}{15}$$

B.
$$\frac{6}{11}$$

C.
$$\frac{5}{13}$$
D. $\frac{1}{2}$



159.
$$\frac{11}{2} \times \frac{3}{10} =$$

A.
$$\frac{9}{10}$$

B.
$$\frac{3}{20}$$

c.
$$\frac{30}{20}$$

D. `33/20

Answer:



160.
$$1 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} =$$

$$\text{A.}\ \frac{-1}{2}$$

$$\mathsf{B.}\;\frac{1}{2}$$

D. 10

Answer:



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161.
$$\frac{3}{5} \div \frac{1}{3} =$$

A. 9

 $\mathsf{B.}\;\frac{1}{3}$

 $\mathsf{C.}\,\frac{1}{5}$

D. $\frac{9}{5}$



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162. Reciprocal of $1\frac{1}{2} =$ ____

A.
$$\frac{2}{3}$$

A.
$$\frac{2}{3}$$
B. $\frac{3}{2}$

$$\mathsf{D.}\,\frac{1}{2}$$

Answer:

- A. 131.71
- B. 138.71
- C. 108.71
- D. 81.789



164.
$$\frac{-24}{84}$$
=____

A.
$$\frac{-7}{2}$$

$$\mathsf{B.}\,\frac{7}{2}$$

$$\mathsf{C.}\,\frac{-2}{7}$$

D.
$$\frac{2}{7}$$



A.
$$\frac{12}{20}$$

B.
$$\frac{2}{20}$$

c.
$$\frac{3}{9}$$

D.
$$\frac{1}{16}$$

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166. $\frac{-4}{9} = \frac{x}{-27}$ then x = ____

B. 16

C. 10

D. 12

Answer:



167.
$$\frac{-2}{5} \times \frac{-7}{10} \div \frac{1}{6} =$$

$$\mathsf{A.} \; \frac{-11}{15}$$

B.
$$\frac{-14}{15}$$

c.
$$\frac{4}{5}$$

D.
$$\frac{3}{4}$$



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168.
$$\left(\frac{3}{4}\right) \div 0 =$$

A. 0

B. -3

C. -4

D. not defined

Answer:



169.
$$\frac{8}{-5} + \frac{-5}{-6} =$$

A.
$$\frac{-23}{30}$$

$$\mathsf{B.}\;\frac{3}{23}$$

c.
$$\frac{-1}{30}$$

D.
$$\frac{1}{16}$$



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170.
$$\frac{3}{8} + \frac{-2}{5} + \frac{7}{8} - \frac{4}{5} =$$

$$\mathsf{A.} \; \frac{1}{3}$$

$$\mathsf{B.}\;\frac{1}{20}$$

$$\mathsf{C.}\,\frac{-1}{4}$$

$$\mathsf{D.}\,\frac{-1}{20}$$

Answer:

171. If we subtract
$$\frac{3}{5}$$
 from $\frac{7}{20}$ we get ____

A.
$$\frac{-1}{4}$$

B.
$$\frac{1}{4}$$

$$\mathsf{C.}\,\frac{-1}{2}$$

D.
$$\frac{2}{7}$$



172. The sum of two Rational numbers is $\frac{1}{2}$ and one of the numbers is $\frac{-8}{19}$ second number is

A.
$$\frac{1}{4}$$

$$\mathsf{B.}\;\frac{3}{31}$$

c.
$$\frac{5}{38}$$

D.
$$\frac{35}{38}$$

Answer:



173. How much can be added to -2 to get $\frac{7}{9}$

$$\text{A.}\ \frac{25}{9}$$

$$\mathsf{B.}\,\frac{5}{9}$$

C.
$$\frac{1}{4}$$

D.
$$\frac{1}{9}$$

Answer:



A.
$$\frac{-2}{15}$$

B.
$$\frac{-28}{15}$$

C.
$$\frac{8}{15}$$

D.
$$\frac{1}{2}$$

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A.
$$\frac{-1}{9}$$

175. $\frac{2}{3} \times \frac{-5}{6} =$ ____

$$\mathsf{B.}\;\frac{1}{2}$$

C.
$$\frac{-5}{9}$$



176.
$$\frac{7}{9} \times 1\frac{1}{2} \times 8\frac{1}{17} \times \left(\frac{1}{2} - \frac{1}{2}\right) = _{--}$$

A.
$$\frac{1}{189}$$

$$\mathsf{B.}\;\frac{1}{24}$$

$$D. \frac{1}{6}$$



177.
$$\left(\left(\frac{5}{9} \right)^{-1} \right)^{-1} =$$

A.
$$\frac{3}{9}$$

B.
$$\frac{9}{5}$$

C.
$$\frac{-1}{9}$$

$$\mathsf{D.}\;\frac{5}{81}$$



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178.
$$\left(\frac{1}{-8}\right)^{-1} =$$

A. 4

B. 1

C. 8

D. -8



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179.
$$x = \frac{-1}{5}, y = \frac{2}{7}$$
 then xy =___

A.
$$\frac{1}{10}$$

$$\mathsf{B.}\,\frac{1}{9}$$

$$\mathsf{C.}\;\frac{1}{35}$$

$$\text{D.}\,\frac{-2}{35}$$

Answer:

180. The multiplicative inverse of
$$\frac{-2}{7} imes \frac{-17}{15}$$
 is ____

A.
$$\frac{105}{34}$$

$$\frac{15}{34}$$

c.
$$\frac{115}{27}$$

$$\mathsf{D.} \; \frac{105}{3}$$



181.
$$\frac{16}{35} \div \frac{3}{7} =$$

A.
$$\frac{7}{3}$$

B.
$$\frac{6}{17}$$

$$\mathsf{C.}\ \frac{1}{15}$$

D.
$$\frac{16}{15}$$



182. If we multiply $\frac{32}{9}$ by ____ we get the product as $\frac{8}{9}$

A.
$$\frac{1}{4}$$

$$\mathsf{B.}\,\frac{-16}{15}$$

c.
$$\frac{9}{7}$$

D.
$$\frac{6}{7}$$

Answer:



183.
$$\frac{1}{2} \times \left(\left(-\frac{2}{3} \right) + \frac{1}{4} \right) = _{---}$$

D. none

Answer:

184.
$$\left| \frac{1}{2} - \frac{1}{2} \right| =$$

A.
$$\frac{-1}{2}$$

B. 1

C. 0

D. $\frac{1}{2}$

Answer:

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A.
$$1\frac{11}{14}$$

185. $4\frac{2}{7} \div 2\frac{2}{5} =$ _____

$$\mathsf{B.}\,1\frac{1}{7}$$

C.
$$12\frac{3}{4}$$

D.
$$11\frac{1}{7}$$



186. The cost of
$$5\frac{2}{5}$$
 litres of milk is $\boxed{101\frac{1}{4}}$ then find the cost of 1 litre

A. ₹
$$9\frac{1}{2}$$

$$\mathsf{B.} \not \in 6\frac{1}{2}$$

$$\mathsf{C}. \not \in 8\frac{1}{2}$$

$$\mathsf{D}. \not \equiv 18\frac{3}{4}$$



187. If we multiply
$$7\frac{5}{9}$$
 by $\frac{3}{2}$ we get _____

A.
$$1\frac{1}{3}$$

B.
$$11\frac{1}{3}$$

c.
$$7\frac{1}{2}$$

$$\mathsf{D.}\,1\frac{1}{2}$$



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188.
$$3\frac{1}{5} - \frac{1}{5} + 1 = ____$$

A. 7

B. 3

C. 4

D. 5

Answer:



189.
$$\frac{13}{14} + \frac{27}{35} =$$

A.
$$1\frac{7}{10}$$

$$\operatorname{B.}2\frac{7}{31}$$

c.
$$1\frac{1}{4}$$

$$\mathsf{D.}\,1\frac{1}{35}$$



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190.
$$\frac{5}{9} - \frac{7}{12} + \frac{1}{2} =$$

$$\mathsf{A.}\ \frac{7}{36}$$

$$\mathsf{B.}\;\frac{17}{36}$$

C.
$$\frac{1}{2}$$
D. $\frac{9}{7}$

D.
$$\frac{9}{7}$$

Answer:

191. $\frac{4}{5}$ th of 1 hour is ___ minutes.

A. 48

B. 84

C. 42

D. 13

Answer:



192. The measurements of a rectangular park are $41\frac{2}{3}$ m and $18\frac{3}{5}$ m then the area =_ m^2

- A. 114
- B. 192
- C. 775
- D. 275

Answer:



$$\frac{a}{y-z} = \frac{b}{z-x} = \frac{c}{x-y}$$

then

$$ax + by + cz = _$$

Answer:



$$B.-4a^2$$

C. -a

Answer:



A.
$$x^2$$

B. x

 $\mathsf{C.}\,x^4$

D. 1

Answer:



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196. $(-2) - \left(\frac{1}{2}\right) + \frac{1}{2} - (7) =$

B. 9

C. 7

D. 16

Answer:



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197.
$$\frac{25}{16} =$$

A. 1.6521

B. 2.532

C. 1.5625

D. 10.56

Answer:



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198. The $\frac{p}{q}$ form of 4. $(\bar{7})$ is _____

A. $\frac{43}{9}$

 $\mathsf{B.}\,\frac{9}{4}$

C. `12/31

D.
$$\frac{47}{10}$$



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199. The natural number 5 can be written as__

A.
$$\frac{10}{2}$$

$$\mathsf{B.}\ \frac{50}{10}$$

C.
$$\frac{10}{3}$$

D. all of above



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200. (2-3)-2=___

A. 3

B. -3

C. -4

D. 6

Answer:

201.
$$\left(\frac{1}{2} - \frac{3}{4}\right) - \left(-\frac{5}{4}\right) =$$

A. 0

B. 1

C. -1

D. 4

Answer:



202. The dimensions of one rectangle are $2\frac{1}{3}$,

 $4\frac{1}{7}$ then its area is___sq. units.

A.
$$\frac{3}{2}$$

B. 4

C. 3

D. $3\frac{1}{2}$

Answer:



203. (b-c) a=__

A. ab-c

B. ac-ba

C. ba-ca

D. b-ac

Answer:



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204. A rational number between 5 and 6 is

A.
$$a+rac{b}{2}$$

B. ab

C.
$$\sqrt{ab}$$

D.
$$\frac{b}{2}$$
 – a

Answer:

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A.
$$\frac{3}{8}$$

205. $\frac{5}{-22} + \frac{13}{33} =$

B.
$$\frac{1}{9}$$

$$\mathsf{C.}\ \frac{1}{2}$$

D.
$$\frac{1}{6}$$



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206. The sum of two rational numbers is -7 and one of the numbers is $-\frac{15}{7}$ then the second number is____

A. 1

B. 4

C. -1

D. none

Answer:



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207. If we multiply the addition of $\frac{91}{12}$ and $\frac{11}{3}$ with their difference we get___

A.
$$\frac{111}{40}$$

B.
$$\frac{135}{47}$$

c.
$$\frac{119}{13}$$

$$\text{D.}\ \frac{35}{47}$$



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208. Sum of two Rational Numbers is 8 and one of them is $\frac{-5}{6}$ then the second number is

$$\frac{53}{6}$$

B.
$$\frac{-53}{6}$$

c.
$$\frac{43}{6}$$

$$\mathsf{D.}\;\frac{13}{6}$$



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209. The difference of period and periodicity of

 $0.\overline{39}$ is

A. 37

B. 39

C. 41

D. 14

Answer:



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210. If $0.\overline{35}$ is expressed in the form of $\frac{p}{q}$ the value of p+q is

A. 27

B. 72

C. 35

D. 53

Answer:



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211. The product of multiplicative inverse of $\frac{2}{11}$ and $\frac{-5}{14}$ is

A. $\frac{28}{55}$

B.
$$\frac{-28}{55}$$

$$\mathsf{C.}\ \frac{55}{28}$$

D.
$$\frac{-55}{28}$$



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212. In which of the following number set / sets

the additive inverse of 9 lies

A. N

B. W

C.Z

D. N and W

Answer:



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213. Which of the following is multiplicative associative property?

$$rac{5}{2} imes\left(rac{3}{7}+rac{9}{5}
ight)=\left(rac{5}{2} imesrac{3}{7}
ight)+\left(rac{5}{2} imesrac{9}{5}
ight)$$

$$\mathsf{B.}\left(\frac{5}{2} + \frac{3}{7}\right) + \frac{9}{5} = \frac{5}{2} + \left(\frac{3}{7} + \frac{9}{5}\right)$$

C.
$$rac{5}{2} imes\left(rac{3}{7} imesrac{9}{5}
ight)=\left(rac{5}{2} imesrac{3}{7}
ight) imesrac{9}{5}$$

D.

$$rac{5}{2} imes\left(rac{3}{7}-rac{9}{5}
ight)=\left(rac{5}{2} imesrac{3}{7}
ight)-\left(rac{5}{2} imesrac{9}{5}
ight)$$

Answer:

