



MATHS

BOOKS - RD SHARMA MATHS (ENGLISH)

FRACTIONS



1. Mrs. Sharma has 24 apples. She uses $\frac{1}{4}$ of them. How many apples does she use? How

many does she have left?



2. Yashi has a packet of 20 biscuits. She gives $\frac{1}{2}$ of them to Yana and $\frac{1}{4}$ of them to Jaya. The real she keeps. How many biscuits does Yana get? How many biscuits does Jaya get? How many biscuits does Yashi keep?

3. What fraction of a day is 8 hours ?

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

B. $\frac{1}{4}$
C. $\frac{1}{5}$
D. $\frac{1}{6}$

Answer: A



4. Determine $\frac{2}{3}$ of a collection of 9 kites. A. 2 **B**. 3 C. 6 D. 8

Answer: C



5. Write the fraction representing the shaded portion: Figure (ii) Figure (ii) Figure Figure (v) Figure (vi) Figure Figure (vii) Figure (viii) Figure

6. Write the fraction representing the shaded parts: Figure (ii) Figure (iii) Figure (iv) Figure



7. Write the fraction representing the shaded

portion: Figure (ii) Figure

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8. Colour the part according to the fraction given: $\frac{1}{6}$ Figure (ii) $\frac{2}{4}$ Figure $\frac{1}{3}$ Figure (iv) $\frac{3}{4}$ Figure $\frac{4}{9}$ Figure (vi) $\frac{1}{4}$ Figure





11. Write the natural numbers from 102 to 113.

What fraction of them are prime numbers?

12. Mukesh has a box of 24 pencils. He give halfof them to Sunita. How many does Sunita get?How many does Mukesh still have?



14. Shikhas has three frocks that she wear when playing. The material is good, but the colours are faded. Her mother buys some blue dye and uses it on two of the frocks. What fraction of all of the Shikha play frocks did her mother dye?



15. Represent
$$\frac{2}{5}$$
 on a number line.





number line.

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17. Represent
$$\frac{2}{7}$$
, $\frac{5}{7}$ and $\frac{6}{7}$ on a number line.

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18. How many fractions lie between 0 and 1.



20. Write each of the following divisions as fractions: (i) $6 \div 3$ (ii) $25 \div 5$ (iii) $125 \div 50$ (iv)

 $55 \div 11$

21. Write each of the following fractions as divisions: $\frac{9}{7}$ (ii) $\frac{3}{11}$ (iii) $\frac{90}{63}$ (iv) $\frac{1}{5}$

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22. Express each of the following mixed fractions as improper fractions: $3\frac{2}{7}$ (ii) $4\frac{5}{9}$ (ii) $3\frac{2}{5}$

23. Express each of the following as mixed fractions: $\frac{17}{4}$ (ii) $\frac{13}{5}$ (iii) $\frac{28}{5}$

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24. Convert each of the following into a mixed fraction:

(i)
$$\frac{28}{9}$$

(ii) $\frac{226}{15}$
(iii) $\frac{145}{9}$
(iv) $\frac{128}{5}$



25. Convert each of the following into an improper fraction: i) $7\frac{1}{4}$ (ii) $8\frac{5}{7}$ (iii) $5\frac{3}{10}$ (iv) $12\frac{7}{15}$

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26. Replace () in each of the following by the correct number $\frac{2}{7} = \frac{8}{()}$ (ii) $\frac{3}{5} = \frac{()}{20}$

27. Find the equivalent fraction of



29. Check whether the given fractions are equivalent :



31. Replace () in each of the following by the correct number:

(i)
$$\frac{2}{7} = \frac{6}{()}$$





- (i) numerator 9
- (ii) denominator 30
- (iii) numerator 21
- (iv) denominator 40



- **33.** Find the fraction equivalent to $\frac{45}{60}$, having:
- (i) numerator 15
- (ii) denominator 4
- (iii) denominator 240
- (iv) numerator 135



34. Find the fraction equivalent of $\frac{35}{42}$, having:

- (i) numerator 15
- (ii) denominator 18
- (iii) denominator 30
- (iv) numerator 30



35. Check whether the given fractions are equivalent:
$$\frac{5}{9}$$
, $\frac{30}{54}$ (ii) $\frac{2}{7}$, $\frac{16}{42}$ (iii) $\frac{7}{13}$, $\frac{5}{11}$ (iv)



38. Ramesh had 20 pencils, Sheelu had 50 pencils and Jamaal had 80 pencils. After 4 months, Ramesh used up 10 pencils, Sheelu used up 25 pencils and Jamaal used up 40 pencils. What fraction did each use up? Check if each has used up an equal fraction



39. Reduce each of the following fractions to

its lowest term: i) $\frac{48}{60}$ (ii) $\frac{126}{90}$

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41. Reduce each of the following fractions to its lowest terms (simplest form): i) $\frac{40}{75}$ (ii) $\frac{42}{28}$



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43. Simplify each of the following to its lowest term: i) $\frac{75}{80}$ (ii) $\frac{52}{76}$ (iii) $\frac{84}{98}$



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45. which is larger
$$\frac{3}{4}$$
 or $\frac{5}{12}$?

46. Arrange the following fractions in ascending order $\frac{5}{8}, \frac{5}{6}, \frac{7}{4}, \frac{3}{5}$.

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47. Compare
$$\frac{7}{8}$$
 and $\frac{5}{6}$

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48. Ravish exercised for $\frac{3}{6}$ an hour, while Rohit exercised for $\frac{3}{4}$ of an hour Who exercised for



50. In a class A of 25 students, 20 passed in

first class; in another class B of 30 students, 24

passed in first class. In which class was a

greater fraction of students getting first class?



51. Write each fraction. Arrange them in ascending and descending order using correct sign $\langle , = , \rangle$ (i) $\frac{3}{5}, \frac{1}{5}, \frac{4}{5}, \frac{2}{5}$ (ii) $\frac{2}{5}, \frac{3}{4}, \frac{1}{2}, \frac{3}{5}$

52. Mark $\frac{2}{6}$, $\frac{4}{6}$, $\frac{8}{6}$ and $\frac{6}{6}$ on the number line and put appropriate signs between fractions given below:



53. Compare the following fractions and put an appropriate sign: $\frac{3}{62}$ (ii) $\frac{3}{60}$ (iii) $\frac{1}{66}$ (iv) $\frac{8}{65}$



54. Compare the following fractions and put

an appropriate sign:

(i)
$$\frac{3}{6}, \frac{5}{6}$$

(ii) $\frac{4}{5}, \frac{0}{5}$
(iii) $\frac{3}{20}, \frac{4}{20}$
(iv) $\frac{1}{7}, \frac{1}{4}$

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55. Compare the following fractions using the

symbol > or < :

(i)
$$\frac{6}{7}$$
 and $\frac{6}{11}$



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56. Compare the following fractions using the symbol > or < : (i) $\frac{8}{3}$ and $\frac{8}{13}$ (ii) $\frac{4}{9}$ and $\frac{15}{8}$



58. The following fractions represent just three different numbers. Separate them in to three groups of equal fractions by changing each one to its simplest form: $\frac{12}{75}$ (ii) $\frac{12}{72}$ (iii) $\frac{3}{18}$ (iv) $\frac{4}{25}$



59. Isha read 25 pages of a book containing 100 pages. Nagma read $\frac{1}{2}$ of the same book. Who read less?



60. Arrange the following fractions in the ascending order:

(i)
$$\frac{2}{9}, \frac{7}{9}, \frac{3}{9}, \frac{4}{9}, \frac{1}{9}, \frac{6}{9}, \frac{5}{9}$$

(ii) $\frac{7}{8}, \frac{7}{25}, \frac{7}{11}, \frac{7}{18}, \frac{7}{10}$
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61. Arrange in descending order in each of the following using the symbol > : $\frac{8}{17}$, $\frac{8}{9}$, $\frac{8}{5}$, $\frac{8}{13}$ (ii) $\frac{5}{9}$, $\frac{3}{12}$, $\frac{1}{3}$, $\frac{4}{15}$ (iii) $\frac{2}{7}$, $\frac{11}{35}$, $\frac{9}{14}$, $\frac{13}{28}$

62. Find answers to the following. Write and

indicate how you solved them.



63. Find answers to the following. Write and indicate how you solved them.

(i) Is
$$\frac{4}{5}$$
 equal to $\frac{16}{20}$?
(ii) Is $\frac{1}{15}$ equal to $\frac{4}{30}$?

64. Write fraction for shaded part of each diagram.



66. Add the following fractions: $2\frac{3}{5} + \frac{4}{5} + 1\frac{2}{5}$

(ii)
$$1\frac{1}{4} + 2\frac{3}{4} + 7\frac{1}{4}$$

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67. Subtract
$$\frac{3}{10}From\frac{8}{10}$$

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68. Compute:
$$\frac{5}{12} - \frac{7}{12} + \frac{11}{12}$$
69. Simplify :
$$4\frac{2}{3} + \frac{1}{3} - 4\frac{1}{3}$$

70. Write these fractions appropriately as

additions or subtractions: Figure Figure



71. Solve :
$$rac{5}{12}+rac{1}{12}$$



73. Solve :
$$\frac{3}{22} + \frac{7}{22}$$

74. Solve :
$$rac{1}{4}+rac{0}{4}$$



75. Solve :
$$\frac{4}{13} + \frac{2}{13} + \frac{1}{13}$$

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76. Solve :
$$\frac{0}{15} + \frac{2}{15} + \frac{1}{15}$$



77. Solve :
$$\frac{7}{31} - \frac{4}{31} + \frac{9}{31}$$



78. Solve :
$$3\frac{2}{7} + \frac{1}{7} - 2\frac{3}{7}$$



79. Solve :
$$2\frac{1}{3} - 1\frac{2}{3} + 4\frac{1}{3}$$



80. Solve :
$$1 - \frac{2}{3} + \frac{7}{3}$$



81. Solve :
$$\frac{16}{7} - \frac{5}{7} + \frac{9}{7}$$

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82. Shikha painted $\frac{1}{5}$ of the wall space in her room. Her brother Ravish helped and painted $\frac{3}{5}$ of the wall space. How much did they paint together? How much the room is left unpainted?



83. Ramesh bought $2\frac{1}{2}$ kg sugar whereas Rohit bought $3\frac{1}{2}$ kg of sugar. Find the total amount of sugar bought by both of them.



84. The teacher taught $\frac{3}{5}$ of the book, Vivek revised $\frac{1}{5}$ more on his own. How much does he still have to revise?



85. Amit was given $\frac{5}{7}$





87. Add: i)
$$\frac{3}{8} + \frac{1}{2}$$
 (ii) $\frac{1}{6} + \frac{3}{8}$



88. Add:
$$2\frac{4}{5}$$
 and $3\frac{5}{6}$



89. Simplify:
$$8\frac{1}{4} - 2\frac{5}{6}$$



90. Find the sum:
$$\displaystyle rac{5}{9}+\ 6+1\displaystyle rac{5}{7}$$



92. Find the difference of
$$\frac{17}{24}$$
 and $\frac{15}{16}$



93. Add:
$$\frac{3}{4}$$
 and $\frac{5}{6}$



95. Add:
$$\frac{8}{13}$$
 and $\frac{2}{3}$



96. Add:
$$\frac{4}{5}$$
 and $\frac{7}{15}$











108. Subtract as indicated: $4\frac{3}{4} - 2\frac{1}{6}$ Watch Video Solution

109. Simplify:
$$rac{2}{3}+rac{3}{4}+rac{1}{2}$$

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110. Simplify:
$$rac{5}{8}+rac{2}{5}+rac{3}{4}$$

111. Simplify:
$$\frac{3}{10} + \frac{7}{15} + \frac{3}{5}$$

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112. Simplify: $\frac{3}{4} + \frac{7}{16} + \frac{5}{8}$
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113. Simplify:
$$4rac{2}{3}+3rac{1}{4}+7rac{1}{2}$$

114. Simplify:
$$7\frac{1}{3} + 3\frac{2}{3} + 5\frac{1}{6}$$

115. Simplify:
$$7+rac{7}{4}+5rac{1}{6}$$

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116. Simplify:
$$\displaystyle rac{5}{6} + 3 + \displaystyle rac{3}{4}$$

117. Simplify:
$$rac{7}{18} + rac{5}{6} + 1rac{1}{12}$$





119. Sarita bought $\frac{2}{5}$



120. Ravish takes $2\frac{1}{5}$ minutes to walk across the school ground. Rahul takes $\frac{7}{4}$ minutes to do the

same. Who takes less time and by what fraction?



121. A piece of wire $\frac{7}{8}$ meter long broke into two pieces. One piece was $\frac{1}{4}$ meter long. How long is the other piece?

122. Asha and Samuel have bookshelves of the same size partly find with books. Asha's shelf is 6 5 th full and Samuel's shelf is 5 2 th full. Whose bookshelf is more full? By what fraction?

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123. Nandinis house is

124. Which of the following is a proper fraction?

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

B. $\frac{3}{4}$
C. $1\frac{3}{4}$
D. $2\frac{1}{5}$

Answer: B



125. Which of the following is an improper fraction?Watch Video Solution



127. A fraction equivalent to $\frac{3}{5}$ is

(a)
$$rac{3+2}{5+2}$$

(b) $rac{3-2}{5-2}$
(c) $rac{3 imes 2}{5 imes 2}$

(d) None of these



128. If
$$\frac{5}{12}$$
 is equivalent to $\frac{x}{3}$, then $x =$ (a) $\frac{5}{4}$ (b) $\frac{4}{5}$ (c) $\frac{5}{3}$ (d) $\frac{3}{5}$

129. Which of the following are like fractions?

A.
$$\frac{3}{5}$$
, $\frac{3}{7}$, $\frac{3}{11}$, $\frac{3}{16}$
B. $\frac{5}{11}$, $\frac{7}{11}$, $\frac{15}{11}$, $\frac{2}{11}$
C. $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, $\frac{6}{7}$

D. None of these

Answer: B



130. If
$$\frac{11}{4} = \frac{77}{x}$$
, then $x =$ a)28 (b) $\frac{77}{28}$ (c) 44 (d) 308

131.
$$\frac{1}{\left(2\frac{1}{3}\right)} + \frac{1}{\left(1\frac{3}{4}\right)}$$
 is equal to
(a) $\frac{7}{14}$ (b) $\frac{12}{49}$ (c) $4\frac{1}{12}$ (d) None of these

132. If
$$\frac{1}{3} + \frac{1}{2} + \frac{1}{x} = 4$$
, then $x = ?$
(a) $\frac{5}{18}$ (b) $\frac{6}{19}$ (c) $\frac{18}{5}$ (d) $\frac{24}{11}$

133. If
$$\frac{1}{2} + \frac{1}{x} = 2$$
, then $x = (a) \frac{2}{5}$ (b) $\frac{5}{2}$ (c) $\frac{3}{2}$ (d) $\frac{2}{3}$

134. Which of the following fractions is the

smallest? $\frac{1}{2}, \frac{3}{7}, \frac{3}{5}, \frac{4}{9}$ A. $\frac{4}{9}$ $\mathsf{B}.\,\frac{3}{5}$ C. $\frac{3}{7}$ D. $\frac{1}{2}$

Answer: C



135. Which of the following fractions is the

greatest of all?

 $\frac{7}{8}, \frac{6}{7}, \frac{4}{5}, \frac{5}{6}$ (a) $\frac{6}{7}$ (b) $\frac{4}{5}$ (c) $\frac{5}{6}$ (d) $\frac{7}{8}$



137. If
$$\frac{a}{b} = \frac{4}{3}$$
, then the value of $\frac{6a + 4b}{6a - 5b}$ is (a) -1 (b) 3 (c) 4 (d) 5



138. If
$$rac{1}{5} - rac{1}{6} = rac{4}{x}, ext{ then } x =$$
 (a) -120 (b) -100 (c) 100 (d) 120

139. The fraction to be added to
$$6\frac{7}{15}$$
 to get $8\frac{1}{5}$ is equal to

(a)
$$\frac{11}{15}$$
 (b) $1\frac{1}{15}$ (c) $\frac{44}{3}$ (d) $\frac{3}{44}$



142.
$$\frac{5}{8} + \frac{3}{4} - \frac{7}{12}$$
 is equal to:
(a) $\frac{15}{24}$ (b) $\frac{17}{24}$ (c) $\frac{19}{24}$ (d) $\frac{21}{24}$



D. None of these

Answer: B





145. A fraction equivalent to $\frac{8}{12}$ is

A.
$$\frac{8+4}{12+4}$$

B. $\frac{8\div 4}{12\div 4}$
C. $\frac{8-4}{12-4}$

D. None of these

Answer: B





147. Which of the following is a proper fraction? 3 5 2

(a)
$$\frac{3}{5}$$
 (b) $\frac{3}{3}$ (c) $1\frac{2}{3}$ (d) None of these



148. Which of the following is a proper fraction?

A.
$$\frac{3}{5}$$

B. $\frac{5}{3}$
C. $1\frac{2}{3}$

D. None of these

Answer: A



149.
$$\frac{34}{13}$$
 is an example of

A. a proper fraction
B. an improper fraction

- C. a mixed fraction
- D. None of these

Answer: B



150. Which of the following fraction is the

smallest?

$$\frac{5}{9}, \frac{4}{9}, \frac{2}{9}, \frac{11}{9}$$
(a) $\frac{11}{9}$

(b) $\frac{4}{9}$ (c) $\frac{5}{9}$ (d) $\frac{2}{9}$

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is







152. If
$$\frac{3}{4}$$
 is equivalent to $\frac{x}{28}$, then the value of x is

A. 6

B. 7

C. 8

D. None of the above

Answer: D

153. If
$$\frac{45}{60}$$
 is equivalent to $\frac{3}{x}$, then the value of x is (a) 3 (b) 6 (c) 4 (d) 9











156. Reduce 84/98 to its lowest terms.



157. The cost of a pen is Rs. $16\left(\frac{3}{5}\right)$ and that of a pencil is Rs. $4\left(\frac{3}{4}\right)$. Which costs more and by

how much?

158. Simplify:
$$5rac{1}{6} - 3rac{1}{4} + 3rac{1}{3} + 4$$



159. Three boxes weigh
$$\frac{18}{3}\frac{1}{4}kg$$
, $7\frac{1}{2}kg$ and $10\frac{1}{5}kg$ respectively. A porter carries all the three boxes. What is the

total weight carried by the porter?



160. Arrange the following fractions in ascending 13 8 17 7

order:
$$\frac{10}{18}, \frac{3}{15}, \frac{11}{24}, \frac{1}{12}$$



163. Shika bought $7\frac{1}{2}$ litres of milk. Out of this milk, $5\frac{3}{4}$ litres was consumed. How much milk is

left with her?



165. Fill in the blanks:
$$7rac{2}{3}+()=9$$

166. Fill in the blanks: $8\frac{1}{8} - () = \frac{7}{8}$



167. simplify:
$$6\frac{1}{6} - 5\frac{1}{5}$$

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168.
$$\frac{90}{108}$$
 reduced to simplest form

169.
$$9\frac{2}{3} + () = 19$$