



MATHS

BOOKS - RD SHARMA MATHS (ENGLISH)

FRACTIONS



1. Reduce
$$\frac{144}{180}$$
 to its lowest form.

2. Which is larger
$$\frac{3}{4}$$
 or $\frac{5}{12}$?

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



A.
$$\frac{13}{48}$$

B. $\frac{5}{48}$
C. $\frac{7}{48}$
D. $\frac{1}{48}$

Answer: D

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7. Simplify:
$$4rac{5}{6} - 2rac{3}{8} + 3rac{7}{12}$$



9. Ramesh solved
$$\frac{2}{7}$$
 part of an exercise while Seema solved $\frac{4}{5}$ of it. Who solved less?

10. Michael finished colouring a picture in $\frac{7}{12}$ hour. Vaibhav finished colouring the same picture in $\frac{3}{4}$ hour. Who worked longer? By what fraction was it longer?



12. Simplify:
$$\frac{9}{11} - \frac{4}{15}$$
 (ii) $8\frac{1}{2} - 3\frac{5}{8}$
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13. Simplify:
$$4rac{2}{3}-3rac{1}{4}+2rac{1}{6}$$



14. Sameera purchased $3\frac{1}{2}$ kg apples and $4\frac{3}{4}$ kg oranges. What is the total weight of fruits purchased by her?



15. Ritu ate $\frac{3}{5}$ part of an apple and the remaining apple was eaten by her brother Somu. How much part of the apple did Somu eat? Who had the larger share? By how much?

16. Salil wants to put a picture in a frame. The picture is 7\frac{3}{5}\ cm\7 5 3 cm wide. To fit in

the frame the picture cannot be more than 7\frac{3}{10}cm7 10 3 cm wide. How much should the picture be trimmed?

17. Compare the following fractions by using the

symbol > or < or= :</pre>

(i)
$$\frac{7}{9}$$
 and $\frac{8}{13}$ (ii) $\frac{11}{9}$ and $\frac{5}{9}$

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18. Compare the following fractions by using the



19. Arrange the following fractions in ascending

order:

(i)
$$\frac{3}{8}$$
, $\frac{5}{6}$, $\frac{6}{8}$, $\frac{2}{4}$, $\frac{1}{3}$ (ii) $\frac{4}{6}$, $\frac{3}{8}$, $\frac{6}{12}$, $\frac{5}{16}$







23. Find the sum: (i)
$$\frac{5}{6} + 3 + \frac{3}{4}$$
 (ii) $2\frac{3}{5} + 4\frac{7}{10} + 2\frac{4}{15}$ (ii) **Watch Video Solution**

24. Find the difference of
$$\frac{13}{24}$$
 and $\frac{7}{16}$ (ii) $6 \text{ and } \frac{23}{3}$

25. Find the difference of $\frac{21}{25}$ and $\frac{18}{20}$ (ii) $3\frac{3}{10}$ and $2\frac{7}{15}$ Watch Video Solution

26. Find the difference:

(i)
$$\frac{6}{7} - \frac{9}{11}$$

(ii) $8 - \frac{5}{9}$

A. (i)
$$\frac{3}{57}$$

(ii) $\frac{37}{9}$



Answer: B



27. Find the difference:
$$9-5rac{2}{3}$$
 (ii) $4rac{3}{10}-1rac{2}{15}$

28. Simplify:
$$\frac{2}{3} + \frac{1}{6} - \frac{2}{9}$$
 (ii) $12 - 3\frac{1}{2}$ (iii) $7\frac{5}{6} - 4\frac{3}{8} + 2\frac{7}{12}$ Watch Video Solution

29. What should be added to
$$5\frac{3}{7}$$
 to get 12?

A.
$$\frac{45}{7}$$

B. $\frac{46}{7}$
C. $\frac{47}{7}$
D. $\frac{48}{7}$

Answer: B



31. Suman studies for $5\frac{2}{3}$ hours daily. She devotes $2\frac{4}{5}$ hours of her time for Science and Mathematics. How much time does she devote for other subjects?

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32. A piece of wire is of length $12\frac{3}{4}m$ if it is cut into two pieces in such a way that the length of one piece is $5\frac{1}{4}m$, what is the length of the other piece?



34. In a magic square, the sum of the numbers in

each row, in each column and along the diagonal

is the same. Is this a magic square?

35. The cost of Mathematics book is Rs $25\frac{3}{4}$ and that of Science book is Rs $20\frac{1}{2}$. Which costs more and by how much?



36. Provide the number in box and also give its

simplest form in each of the following: $\frac{2}{3} \times = \frac{10}{30}$ (ii) $\frac{3}{5} \times = \frac{24}{75}$

37. Multiply:
$$\frac{2}{9} by \frac{4}{5}$$
 (ii) $\frac{3}{5} by 12$

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38. Multiply:
$$2\frac{1}{3}by\frac{2}{5}$$
 (ii) $5\frac{3}{4}by2\frac{3}{7}$

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39. Multiply and reduce to lowest form (if possible):
$$\frac{2}{3} \times \frac{5}{4}$$
 (ii) $\frac{1}{3} \times \frac{15}{8} \frac{4}{5} \times \frac{12}{7}$

40. Simplify: (i)
$$5 \times \frac{3}{20} \times \frac{2}{15}$$
 (ii)
 $\frac{14}{25} \times \frac{35}{51} \times \frac{34}{49}$
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41. Which is greater? $\frac{2}{7} of \frac{3}{4}$ or $\frac{3}{5} of \frac{5}{8}$
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42. Find: (i)
$$\frac{3}{5}$$
 of a rupee (ii) $\frac{3}{4}$ of a year



43. Find: (i)
$$\frac{2}{3}$$
 of a day (ii) $\frac{5}{8}$ of a kilogram

44. Find: (i)
$$\frac{2}{3}$$
 of an hour (ii) $\frac{7}{25}$ of a litre





46. A car runs 16 km using 1 litre of petrol. How much distance will it cover using $2\frac{3}{4}$ litres of petrol?

47. Shikha has read $\frac{3}{4}$ of a book consisting of

288 pages. How many pages are still left?





wide. What is the area of the park?



49. Find the area of a square field if its each side is $10\frac{3}{4}$ m long.

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50. Priya spends $\frac{3}{5}$ of her income on house hold expenses and $\frac{1}{7}$ of her income on personal expenses. If her monthly income is Rs 35000, find her monthly savings.



51. A carton contains 40 boxes of nails and each box weight $3\frac{3}{4}kg$. How much would a cartoon of nails weight?



53. Multiply: (i)
$$3\frac{4}{15}$$
 by 24 (ii) $3\frac{1}{8}$ by $4\frac{10}{11}$





54. Find the product:
$$\frac{4}{7} \times \frac{14}{25}$$
 (ii) $7\frac{1}{2} \times 2\frac{4}{15}$
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55. Find the product: (i)
$$3\frac{6}{7} \times 4\frac{2}{3}$$
 (ii)
 $6\frac{11}{14} \times 3\frac{1}{2}$ Watch Video Solution

56. Simplify: (i)
$$\frac{12}{25} \times \frac{15}{28} \times \frac{35}{36}$$
 (ii) $\frac{10}{27} \times \frac{39}{56} \times \frac{28}{65}$ (iii) $2\frac{2}{17} \times 7\frac{2}{9} \times 1\frac{33}{52}$ **(b) Watch Video Solution**

57. Find:
$$\frac{1}{2}of 4\frac{2}{9}$$
 (ii) $\frac{5}{8}of 9\frac{2}{3}\frac{2}{3}of \frac{9}{16}$

58. Which is greater?
$$\frac{1}{2} of \frac{6}{7}$$
 or $\frac{2}{3} of \frac{3}{7}$



59. Find:
$$\frac{7}{11} of Rs \ 330$$
 (ii) $\frac{5}{9} \ of \ 108$ metres

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60. Find:
$$\frac{3}{7} of 42$$
 litres (ii) $\frac{1}{12}$ of an hour

61. Find:
$$\frac{5}{6}$$
 of an year (ii) $\frac{3}{20}$ of a kg



62. Find: (i)
$$\frac{7}{20}$$
 of a litre (ii) $\frac{5}{6}$ of a day (iii) $\frac{2}{7}$ of a week



63. Shikha plants 5 saplings in a row in her garden. The distance between two adjacent saplings is $\frac{3}{4}m$. Find the distance between the first and the last sapling.



64. Ravish reads $\frac{1}{3}$ part of a book in 1 hour. How much part of the book will he read in $2\frac{1}{5}$ hours?



65. Lipika reads a book for $1\frac{3}{4}$ hours every day. She reads the entire book in 6 days. How many hours in all were required by her to read the book? 66. Find the area of a rectangular park which is

$$41rac{2}{3}m$$
 long and $18rac{3}{5}m$ broad.

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67. If milk is available at Rs. $17\frac{3}{4}$ per litre, find the cost of $7\frac{2}{5}$ litres of milk.

68. Sharda can walk $8\frac{1}{3}km$ in one hour. How much distance will she cover in $2\frac{2}{5}$ hours?

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69. A sugar bag contains 30 kg of sugar. After consuming $\frac{2}{3}$ of it, how much sugar is left in the bag?

70. Each side of a square is $6\frac{2}{3}$ m long. Find its

area.



71. There are 45 students in a class and $\frac{3}{5}$ of them are boys. How many girls are there in the class?



72. Divide: (i) $\frac{5}{9}$ by $\frac{2}{3}$ (ii) 28 by $\frac{7}{4}$ (iii) 36 by $6\frac{2}{3}$

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73. Simplify:

(i)
$$\frac{4}{9} \div \frac{2}{3}$$

(ii) $3\frac{3}{7} \div \frac{8}{21}$
(iii) $15\frac{3}{7} \div 1\frac{23}{49}$





74. Simplify:

$$\left(\frac{16}{5} \div \frac{8}{20}\right) + \left(\frac{15}{5} \div \frac{3}{35}\right)$$
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75. The cost of
$$5\frac{2}{5}$$
 kg of sugar is Rs $101\frac{1}{4}$, find its cost per kg.

76. The product of two numbers is $20\frac{5}{7}$. If one of the numbers is $6\frac{2}{3}$, find the other. Watch Video Solution



78. If the cost of a notebook is Rs $8\frac{3}{4}$, how many notebooks can be purchased for Rs $131\frac{1}{4}$?



79. A bucket contains $24\frac{3}{4}$ litres of water. How many $\frac{3}{4}$ litre jugs can be filled from the bucket to get it emptied?



80. Find the reciprocal of each of the following fractions and classify them as proper, improper and whole numbers:





81. Find the reciprocal of each of the following

fractions and classify them as proper, improper and whole numbers:

(i)
$$\frac{9}{7}$$

(ii) $\frac{6}{5}$



82. Find the reciprocal of each of the following

fractions and classify them as proper, improper

and whole numbers:





83. Divide:

(i)
$$\frac{3}{8}$$
 by $\frac{5}{9}$
(ii) $3\frac{1}{4}$ by $\frac{2}{3}$

84. Divide:

(i)
$$\frac{7}{8}$$
 by $4\frac{1}{2}$
(ii) $6\frac{1}{4}$ by $2\frac{3}{5}$

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85. Divide:

(i)
$$\frac{3}{8}$$
 by 4
(ii) $\frac{9}{16}$ by 6

86. Divide:

(i) 9 by
$$\frac{3}{16}$$

(ii) 10 by $\frac{100}{3}$

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(i)
$$\frac{3}{10} \div \frac{10}{3}$$

(ii) $4\frac{3}{5} \div \frac{4}{5}$





89. A wire of length $12\frac{1}{2}m$ is cut into 10 pieces

of equal length. Find the length of each piece.

90. The length of a rectangular plot of area $65\frac{1}{3}m^2$ is $12\frac{1}{4}$ m. What is the width of the plot?



91. By what number should $6\frac{2}{9}$ be multiplied to get $4\frac{4}{9}$?



92. The product of two numbers is $25\frac{5}{6}$. If one of the numbers is $6\frac{2}{3}$, find the other.

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93. The cost of $6\frac{1}{4}$ kg of apples is Rs 400. At what rate per kg are the apples being sold?



94. By selling oranges at the rate of Rs $5\frac{1}{4}$ per orange, a fruit-seller gets Rs 630. How many dozens of oranges does he sell?



95. In mid-day meal scheme $\frac{3}{10}$ litre of milk is given to each student of a primary school. If 30 litre of milk is distributed every day in the school, how many students are there in the school?



96. In a charity show Rs 6496 were collected by selling some tickets. If the price of each ticket was Rs $50\frac{3}{4}$, how many tickets were sold?



97. If a fraction $\frac{a}{b}$ is a lowest terms. Then HCF of a and b is a (b) b (c)1 (d) ab



100. Which of the following fraction is an irreducible (or in its lowest terms)?



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101. Which of the following is a proper fraction?

(a)
$$\frac{13}{17}$$

(b) $\frac{17}{13}$
(c) $\frac{12}{5}$
(d) $1\frac{3}{4}$



102. The reciprocal of the fraction
$$2\frac{3}{5}$$
 is
(a) $2\frac{5}{3}$ (b) $\frac{13}{5}$ (c) $\frac{5}{13}$ (d) $2\frac{2}{5}$
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103.
$$4\frac{1}{3} - 2\frac{1}{3} =$$

(a) $2\frac{1}{3}$ (b) 2 (c) $3\frac{1}{3}$ (d) $\frac{1}{2}$

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104.
$$2\frac{3}{5} \div \frac{5}{7} =$$

(a) $\frac{13}{7}$ (b) $\frac{13}{25}$ (c) $\frac{91}{25}$ (d) $\frac{25}{91}$

105. By what number should
$$1\frac{3}{4}$$
 be divided to
get $2\frac{1}{2}$?
(a) $\frac{3}{7}$ (b) $1\frac{2}{5}$ (c) $\frac{7}{10}$ (d) $1\frac{3}{7}$
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106. By what number $4\frac{3}{5}$ be multiplied to get $2\frac{3}{7}$? (a) $\frac{391}{35}$ (b) $\frac{85}{91}$ (c) $\frac{91}{85}$ (d) None of these Watch Video Solution

107.
$$\left(5\frac{1}{4} - 3\frac{1}{3}\right)$$
=

(a)(12/23)

(b) 2

$$(\mathsf{c})\left(1\frac{11}{12}\right)$$

(d) (11/12)





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109. By what number
$$9\frac{4}{5}$$
 be multiplied to get 42?

(a)
$$\frac{30}{7}$$
 (b) $\frac{7}{30}$ (c) $4\frac{1}{7}$ (d) $4\frac{3}{7}$

110. Which of the following statements is true?

(a)
$$\frac{7}{12} < \frac{4}{21}$$
 (b) $\frac{7}{12} = \frac{4}{21}$
(c) $\frac{7}{12} > \frac{4}{21}$ (d) None of these



111. Which of the following statements is true?

(a)
$$\frac{3}{4} < \frac{2}{3} < \frac{12}{15}$$

(b) $\frac{2}{3} < \frac{3}{4} < \frac{12}{15}$ (c) $\frac{2}{3} < \frac{12}{15} < \frac{3}{4}$ (d) $\frac{12}{15} < \frac{2}{3} < \frac{3}{4}$

112. Which of the following fractions lies between

$$\frac{2}{3}and\frac{5}{7}?$$
(a) $\frac{3}{4}$ (b) $\frac{4}{5}$ (c) $\frac{5}{6}$ (d) None of these

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113. Which one of the following is true? (a)

$$\begin{aligned} \frac{1}{2} &< \frac{9}{13} < \frac{3}{4} < \frac{12}{17} \\ \text{(b)} \quad \frac{3}{4} &< \frac{9}{13} < \frac{1}{2} < \frac{12}{17} \\ \frac{1}{2} &< \frac{3}{4} < \frac{9}{13} < \frac{12}{17} \\ \text{(d)} \quad \frac{1}{2} &< \frac{9}{13} < \frac{12}{17} < \frac{3}{4} \end{aligned} \tag{c)}$$



115.
$$9 \times \left(-\frac{1}{3}\right) \times (-3) \times \left(-\frac{1}{9}\right) =$$

(a) 1
(b) -1
(c) -3
(d) 3





117. Which is the smallest of the following fractions? (a) $\frac{4}{9}$

(b)
$$\frac{2}{5}$$

(c) $\frac{3}{7}$
(d) $\frac{1}{4}$

118. The difference between the greatest and the

least fractions out of
$$\frac{6}{7}$$
, $\frac{7}{8}$, $\frac{8}{9}$ and $\frac{9}{10}$ is? (a)
 $\frac{3}{70}$ (b) $\frac{1}{56}$ (c) $\frac{1}{40}$ (d) $\frac{1}{72}$

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119. Which of the following fractions is greater

than
$$\frac{3}{4}$$
 and less than $\frac{5}{6}$?
(a) $\frac{2}{3}$ (b) $\frac{1}{2}$ (c) $\frac{4}{5}$ (d) $\frac{9}{10}$

120. Which of the following fractions is more

than one-third?

(a)
$$\frac{23}{70}$$
 (b) $\frac{205}{819}$ (c) $\frac{26}{75}$ (d) $\frac{118}{335}$

