



#### MATHS

## BOOKS - RD SHARMA MATHS (HINGLISH)

### FRACTIONS

All Questions

**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 ?



6. Write the natural numbers from 2 to 12.
What fraction of them are prime numbers?
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7. Write the natural numbers from 102 to 113.

What fraction of them are prime numbers?

8. Mukesh has a box of 24 pencils. He give half

of them to Sunita. How many does Sunita get?

How many does Mukesh still have?



**9.** Kavita has 44 cassettes. She gives  $\frac{3}{4}$  of them to Sonia. How many does Sonia get? How

many does Kavita keep?

**10.** 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?

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



14. How many fractions lie between 0 and 1.

# **15.** Represent $\frac{0}{8}$ and $\frac{8}{8}$ on a number line. Watch Video Solution

**16.** Write each of the following divisions as fractions: (i) $6 \div 3$  (ii)  $25 \div 5$  (iii)  $125 \div 50$  (iv)  $55 \div 11$ 

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

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

**20.** Convert each of the following into a mixed fraction:  $\frac{28}{9}$  (ii)  $\frac{226}{15}$  (iii)  $\frac{145}{9}$  (iv)  $\frac{128}{5}$  **Watch Video Solution** 

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





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



25. Check whether the given fractions are equivalent: (a) 
(a) 
(b) 
(c) 
(c)





**27.** Find the equivalent fraction of  $\frac{3}{5}$ , having numerator 9 (ii) denominator 30 numerator 21 (iv) denominator 40



**28.** Find the fraction equivalent to  $\frac{45}{60}$ , having: numerator 15 (ii) denominator 4 denominator

240 (iv) numerator 135



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

numerator 15 (ii) denominator 18 denominator

30 (iv) numerator 30



**30.** 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)  $\frac{4}{11}$ ,  $\frac{32}{88}$  (v)  $\frac{3}{10}$ ,  $\frac{12}{50}$  (vi)  $\frac{9}{27}$ ,  $\frac{25}{75}$ 



32. Write some equivalent fractions which

contain all digits from 1 to 9 once only.



**33.** 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.** Simplify each of the following to its lowest term:  $\frac{68}{17}$  (ii)  $\frac{150}{50}$  (iii)  $\frac{162}{108}$ 

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



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









**45.** 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?



**46.** 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)  $\frac{2}{5}, \frac{3}{4}, \frac{1}{2}, \frac{3}{5}$ 

**47.** 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:

**48.** Compare the following fractions and put an

appropriate sign: 
$$\frac{3}{62}$$
 (ii)  $\frac{3}{60}$  (iii)  $\frac{1}{66}$  (iv)  $\frac{8}{65}$ 

49. 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)  $\frac{1}{7}, \frac{1}{4}$ 



**50.** Compare the following fractions using the symbol > or < :  $\frac{6}{7}and\frac{6}{11}$  (ii)  $\frac{3}{7}and\frac{5}{7}$  $\frac{2}{3}and\frac{8}{12}$  (iv)  $\frac{1}{5}and\frac{4}{15}$ 





**52.** The following fractions represent just three different numbers. Separate them into three groups of equivalent fractions, by changing each one to its simplest form. (a)  $(frac{2}{12})$ 

**53.** 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)  $\frac{4}{25}$  **Watch Video Solution** 

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

**55.** Arrange the following fractions in the ascending order:  $\frac{2}{9}, \frac{7}{9}, \frac{3}{9}, \frac{4}{9}, \frac{1}{9}, \frac{6}{9}, \frac{5}{9}$  (ii)  $\frac{7}{8}, \frac{7}{25}, \frac{7}{11}, \frac{7}{18}, \frac{7}{10}$ 

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



**59.** Add the following fractions: 
$$\frac{1}{6} + \frac{4}{6}$$
 (ii)  
 $\frac{2}{7} + \frac{3}{7} + \frac{4}{7}$   
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**60.** 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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**61.** Subtract 
$$\frac{3}{10} From \frac{8}{10}$$





**62.** Compute: 
$$rac{5}{12} - rac{7}{12} + rac{11}{12}$$

**63.** Simplify : 
$$4rac{2}{3}+rac{1}{3}-4rac{1}{3}$$

**64.** Solve : 
$$rac{5}{12}+rac{1}{12}$$





**65.** Solve : 
$$\frac{3}{15} + \frac{7}{15}$$

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

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





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

**69.** Solve : 
$$rac{0}{15} + rac{2}{15} + rac{1}{15}$$

70. Solve : 
$$rac{7}{31} - rac{4}{31} + rac{9}{31}$$





71. Solve : 
$$3rac{2}{7}+rac{1}{7}-\ 2rac{3}{7}$$

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

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





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

**75.** 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?



**76.** 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.



**77.** 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?

**78.** Javed was given kfrac{5}{7}

**79.** Fill in the missing fractions: 
$$\frac{7}{10} - () = \frac{3}{10}$$
  
(ii)  $() - \frac{3}{6} = \frac{3}{6}$   $() - \frac{3}{6} = \frac{3}{6}$  (iv)  
 $() - \frac{5}{27} = \frac{12}{27}$ .

80. Add: 
$$rac{3}{8}+rac{1}{2}$$
 (ii)  $rac{1}{6}+rac{3}{8}$ 





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

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

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**83.** Find the sum: 
$$\frac{5}{9}$$
 + 6 + 1 $\frac{5}{7}$ 





84. Simplify: 
$$4\frac{2}{3} - 3\frac{1}{4} + 2\frac{1}{6}$$
  
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**85.** Find the difference of 
$$\frac{17}{24}$$
 and  $\frac{15}{16}$ 

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





**87.** Add: 
$$\frac{7}{10}$$
 and  $\frac{2}{15}$ 

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

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





**90.** Subtract: 
$$\frac{2}{7}$$
 om  $\frac{19}{21}$ 

**91.** Subtract: 
$$\frac{21}{25}$$
 om  $\frac{18}{20}$ 



**92.** Subtract: 
$$\frac{7}{16}$$
 om  $\frac{18}{20}$ 





93. Subtract: 
$$\frac{4}{15}$$
 om  $2\frac{1}{5}$   
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94. Find the difference of :  $\frac{13}{24}$  and  $\frac{7}{16}$   
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95. Find the difference of :  $\frac{5}{18}$  and  $\frac{4}{15}$ 





**98.** Subtract as indicated: 
$$\frac{8}{3} - \frac{5}{9}$$











102. Simplify: 
$$\frac{2}{3} + \frac{3}{4} + \frac{1}{2}$$

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

104. Simplify: 
$$rac{3}{10} + rac{7}{15} + rac{3}{5}$$





105. Simplify: 
$$rac{3}{4}+rac{7}{16}+rac{5}{8}$$



106. Simplify: 
$$4rac{2}{3}+\ 3rac{1}{4}+\ 7rac{1}{2}$$

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





**108.** Simplify: 
$$7 + \frac{7}{4} + 5\frac{1}{6}$$

109. Simplify: 
$$rac{5}{6}+3+rac{3}{4}$$

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





111. Replace ( ) by the correct number:  
( ) 
$$-\frac{5}{8} = \frac{1}{4}$$
 (ii) ( )  $-\frac{1}{5} = \frac{1}{2}\frac{1}{2} - ($  )  $=\frac{1}{6}$ 



**113.** 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?



115. Asha and Samuel have bookshelves of the

same size partly filled with books. Ashas shelf is



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117. Which of the following is a proper fraction?

$$rac{4}{3}$$
 (b)  $rac{3}{4}$  (c)  $1rac{3}{4}$  (d)  $2rac{1}{5}$ 





119. Which of the following is a fraction equivalent to 
$$\frac{2}{3}$$
?  $\frac{4}{5}$  (b)  $\frac{8}{6}$  (c)  $\frac{10}{25}$  (d)  $\frac{10}{15}$ 

**120.** A fraction equivalent to  $\frac{3}{5}$  is  $\frac{3+2}{5+2}$  (b)  $\frac{3-2}{5-2}$  (c)  $\frac{3x2}{5x2}$  (d) None of these Watch Video Solution









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

124. 
$$\frac{1}{\left(2\frac{1}{3}\right)} + \frac{1}{\left(1\frac{3}{4}\right)}$$
 is equal to  $\frac{7}{14}$  (b)  $\frac{12}{49}$  (c)  $4\frac{1}{12}$  (d) None of these

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

**126.** If 
$$\frac{1}{2} + \frac{1}{x} = 2$$
, then  $x = \frac{2}{5}$  (b)  $\frac{5}{2}$  (c)  $\frac{3}{2}$  (d)  $\frac{2}{3}$  **Watch Video Solution**

**127.** Which of the following fractions is the smallest?  $\frac{1}{2}$ ,  $\frac{3}{7}$ ,  $\frac{3}{5}$ ,  $\frac{4}{9}$ ,  $\frac{4}{9}$  (b)  $\frac{3}{5}$  (c)  $\frac{3}{7}$  (d)  $\frac{1}{2}$ 



**128.** Which of the following fractions is the greatest of all?  $\frac{7}{8}$ ,  $\frac{6}{7}$ ,  $\frac{4}{5}$ ,  $\frac{5}{6}$ ,  $\frac{6}{7}$  (b)  $\frac{4}{5}$  (c)  $\frac{5}{6}$  (d)  $\frac{7}{8}$ 



129. What is the value of 
$$\frac{a+b}{a-b}$$
 , if  $\frac{a}{b}=4?$   $\frac{3}{5}$  (b)  $\frac{5}{3}$  (c)  $\frac{4}{5}$  (d)  $\frac{5}{4}$ 

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

**131.** If 
$$\frac{1}{5} - \frac{1}{6} = \frac{4}{x}$$
, then  $x = -120$  (b)  $-100$  (c) 100 (d) 120

**132.** The fraction to be added to  $6\frac{7}{15}$  to get  $8\frac{1}{5}$  is equal to  $\frac{11}{15}$  (b)  $1\frac{1}{15}$  (c)  $\frac{44}{3}$  (d)  $\frac{3}{44}$ 

**133.** If 
$$\frac{45}{60}$$
 is equivalent to  $\frac{3}{x}$ , then  $x = 5$  (b) (4) (c) 6 (d) 20



**134.** A fraction equivalent to  $\frac{45}{105}$  is  $\frac{6}{14}$  (b)  $\frac{4}{7}$  (c)  $\frac{5}{7}$  (d)  $\frac{7}{5}$ Watch Video Solution 135.  $\frac{5}{8} + \frac{3}{4} - \frac{7}{12}$  is equal to:  $\frac{15}{24}$  (b)  $\frac{17}{24}$  (c)  $\frac{19}{24}$ (d)  $\frac{21}{24}$ Watch Video Solution

**136.** The correct fraction in the box () is ()  $-\frac{5}{8} = \frac{1}{4} \frac{6}{8}$  (b)  $\frac{7}{8}$  (c)  $\frac{1}{2}$  (d) None of these





**138.** A fraction equivalent to 
$$\frac{8}{12}$$
 is  $\frac{8+4}{12+4}$  (b)  
 $\frac{8 \div 4}{12 \div 4}$  (c)  $\frac{8-4}{12-4}$  (d) None of these  
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**140.** Which of the following is a proper fraction?  $\frac{3}{5}$  (b)  $\frac{5}{3}$  (c)  $1\frac{2}{3}$  (d) None of these

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**141.** Which of the following is a proper fraction?  $\frac{3}{5}$  (b)  $\frac{5}{3}$  (c)  $1\frac{2}{3}$  (d) None of these



**142.**  $\frac{34}{13}$  is an example of a proper fraction (b) an improper fraction a mixed fraction (d) None of these



**143.** Which of the following fraction is the smallest?  $\frac{5}{9}$ ,  $\frac{4}{9}$ ,  $\frac{2}{9}$ ,  $\frac{11}{9}$ ,  $\frac{11}{9}$  (b)  $\frac{4}{9}$  (c)  $\frac{5}{9}$  (d)  $\frac{2}{9}$ 

**144.** The smallest of the fractions  $\frac{3}{5}$ ,  $\frac{2}{3}$ ,  $\frac{5}{6}$ ,  $\frac{7}{10}$ , is  $\frac{2}{3}$  (b)  $\frac{3}{5}$  (c)  $\frac{5}{6}$  (d)  $\frac{7}{10}$ Watch Video Solution











# **150.** 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?



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



total weight carried by the porter?



153. Arrange the following fractions in ascending

order:  $\frac{13}{18}, \frac{8}{15}, \frac{17}{24}, \frac{7}{12}$ 



**155.** 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?





157. Fill in the blanks: 
$$7rac{2}{3}+~=9$$



**158.** Fill in the blanks: 
$$8\frac{1}{8} - = \frac{7}{8}$$



**159.** 
$$6\frac{1}{6} - 5\frac{1}{5} =$$



**160.** 
$$\frac{90}{108}$$
 reduced to simplest form .....



161.9
$$\frac{2}{3}$$
 + = 19

