



# MATHS

## BOOKS - NCERT EXEMPLAR

### FRACTIONS AND DECIMALS

#### Solved Examples

1. Savita is dividing  $1\left(\frac{3}{4}\right)$  kg of sweets equally among her seven friends. How much does each friend receive?

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

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

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

D.  $\frac{3}{28}$  kg

**Answer: B**



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2. If  $\frac{3}{4}$  of a number is 12, the number is

A. 9

B. 16

C. 18

D. 32

**Answer: B**



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3. Product of fractions  $\frac{2}{7}$  and  $\frac{5}{9}$  is

A.  $\frac{2 \times 5}{7 + 9}$

B.  $\frac{2 + 5}{2 + 9}$

C.  $\frac{2 \times 9}{5 \times 7}$

D.  $\frac{2 \times 5}{7 \times 9}$

**Answer: D**



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4. Given that  $0 < p < q < r < s$  and  $p, q, r, s$  are integers, which of the following is the smallest?

A.  $\frac{p + q}{r + s}$

B.  $\frac{p + s}{q + r}$

C.  $\frac{q + s}{p + r}$

D.  $\frac{r + s}{p + q}$

**Answer: A**



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5. The next number of the pattern 60, 30, 15,  
\_\_\_\_\_ is

A. 10

B. 5

C.  $\frac{15}{4}$

D.  $\frac{15}{2}$

**Answer: D**



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**6.** The decimal expression for 8 rupees 8 paise  
(in Rupees) is

A. 8.8

B. 8.08

C. 8.008

D. 88

**Answer: B**



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7. Each side of a regular hexagon is 3.5cm long.

The perimeter of the given polygon is

A. 17.5 cm

B. 21 cm

C. 18.3 cm

D. 20 cm

**Answer: B**



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**8.**  $2.5 / 1000$  is equal to

A. 0.025

B. 0.0025



C. 0.25

D. 25000

**Answer: B**



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**9.** Which of the following has the smallest value?

A. 0.0002

B.  $\frac{2}{1000}$

C.  $\frac{(0.2)^2}{2}$

D.  $\frac{2}{100} / 0.01$

**Answer: A**



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**10.** Which of the following has the largest value?

A.  $\frac{32}{0.05}$

B.  $\frac{0.320}{50}$

C.  $\frac{3.2}{0.005}$

D.  $\frac{3.2}{50}$

**Answer: A**



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**11. The largest of the following is**

A. 0.0001

B.  $\frac{1}{1000}$

C.  $(0.100)^2$

D.  $\frac{1}{10} / 0.1$

**Answer: D**



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**12.** A fraction acts as an operator \_\_\_\_\_



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**13.** Fraction which is reciprocal of  $\frac{2}{3}$  is  
\_\_\_\_\_.



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**14.** (a) The product of two proper fractions is less than each of the fractions that are multiplied. (b) The product of a proper and an improper fraction is less than the improper fraction and greater than the proper fraction. (c) The product of two impo



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**15.** If the product of two non-zero rational numbers is 1, then they are Additive inverse of each other Multiplicative inverse of each other Reciprocal of each other Both (b) and (c)



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**16.** 5 rupees 5 paise = Rs \_\_\_\_\_.



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17.  $45\text{mm} = \underline{\hspace{2cm}} \text{ m}$



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18.  $2.4 \times 1000 = \underline{\hspace{2cm}}$



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19. To divide a decimal number by 100, we shift the decimal point in the number to the            by        places.



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**20.** Reciprocal of an improper fraction is an improper fraction.



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**21.**  $2\left(\frac{2}{5}\right) / 2\left(\frac{1}{5}\right) = 2$



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**22.**  $0.04 / 0.2 = 0.2$



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**23.**  $0.2 \times 0.3 = 0.6$



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**24.** Find  $\frac{2}{3}$  of 6 using circles with shaded parts.



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**25.** Find the value of

$$\frac{1}{4\left(\frac{2}{7}\right)} + \frac{1}{3\left(\frac{11}{13}\right)} + \frac{1}{\frac{5}{9}}$$



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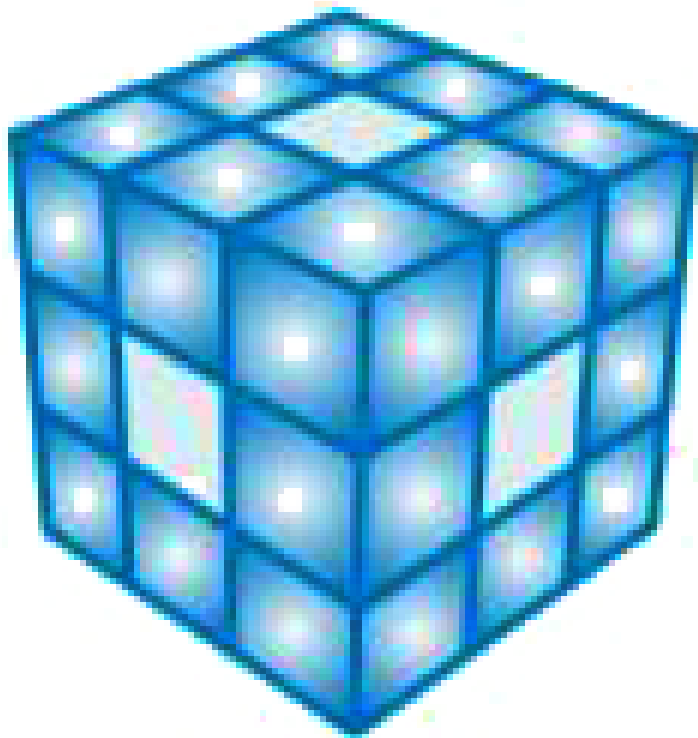
**26.** There is a  $3 \times 3 \times 3$  cube which consists of twenty seven  $1 \times 1 \times 1$  cubes (see Fig. 2.3). It is

‘tunneled’ by removing cubes from the coloured squares.

Find: (i) Fraction of number of small cubes removed to the number of small cubes left in given cube.

(ii) Fraction of the number of small cubes removed to the total number of small cubes.

(iii) What part is (ii) of (i)?



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27. 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?



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28. How many  $\frac{2}{3}$  kg pieces can be cut from a cake of weight 4 kg?



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**29.** Harmeet purchased 3.5kg of potatoes at the rate of Rs 13.75 per kg. How much money should she pay in nearest rupees?



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**30.** Kavita had a piece of rope of length 9.5 m. She needed some small pieces of rope of length 1.9 m each. How many pieces of the required length will she get out of this rope?



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**31.** Three boys earned a total of Rs 235.50.

What was the average amount earned per boy?



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**32.** Find the product of

(i)  $\frac{1}{2}$  and  $\frac{5}{8}$ , (ii)  $\frac{1}{3}$  and  $\frac{7}{5}$ , (iii)  $\frac{4}{3}$  and  $\frac{5}{2}$



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33. Observe the 3 products given in Example

32

(i)  $\frac{1}{2} \times \frac{5}{8}$

(ii)  $\frac{1}{3} \times \frac{7}{5}$

(iii)  $\frac{4}{3} \times \frac{5}{2}$

and now give the answers of the following questions.

(i) Does interchanging the fractions in the example,

$\frac{1}{2} \times \frac{5}{8}$  affect the answer?



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**34.** Reshma uses  $\frac{3}{4}$  m of cloth to stitch a shirt.

How many shirts can she make with  $2\left(\frac{1}{4}\right)$  m cloth?



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**35.** If the fraction of the frequencies of two notes have a common factor between the numerator and denominator, the two notes are harmonious. Use the graphic below to find

the fraction of frequency of notes D and B.



Frequency Chart



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36. Khilona said that we have gone about 120km or  $\frac{2}{3}$  of the way to the camp site. So, how much farther do we have to go?



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## Think And Discuss

1. If  $\frac{1}{3}$  of the total distance is 120 km, then how far is the camp site?



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2. Explain whether you need to find a common denominator to compare  $\frac{2}{3}$  and  $-\frac{1}{2}$ .



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3. Describe the steps you would use to compare 0.235 and 0.239.



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4. Give an example of an addition problem that involves connecting an improper fraction in the final step.



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5. Explain why  $\frac{7}{9} + \frac{7}{9}$  does not equal  $\frac{14}{18}$ .



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6. Name the number of decimal places in the product of 5.625 and 2.75



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7. Give an example of two fractions whose product is an integer due to common factors.



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8. Explain how you can be sure that a fraction is simplified.



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9. Give the sign of a fraction in which the numerator is negative and the denominator is negative.



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1.  $\frac{2}{5} \times 5\left(\frac{1}{5}\right)$  is equal to:

A.  $\frac{26}{25}$

B.  $\frac{52}{25}$

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

D. 6

**Answer: 6**



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2.  $3\left(\frac{3}{4}\right) / \frac{3}{4}$  is equal to:

A. 3

B. 4

C. 5

D.  $\frac{45}{16}$

**Answer:**  $\frac{45}{16}$



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3. A ribbon of length  $5\left(\frac{1}{4}\right)$  m is cut into small pieces each of length  $\frac{3}{4}$

Number of pieces will be:

A. 5

B. 6

C. 7

D. 8

**Answer: C**



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4. The ascending arrangement of  $\frac{2}{3}$ ,  $\frac{6}{7}$ ,  $\frac{13}{21}$  is

A.  $\frac{6}{7}$ ,  $\frac{2}{3}$ ,  $\frac{13}{21}$

B.  $\frac{13}{21}$ ,  $\frac{2}{3}$ ,  $\frac{6}{7}$

C.  $\frac{6}{7}$ ,  $\frac{13}{21}$ ,  $\frac{2}{3}$

D.  $\frac{2}{3}$ ,  $\frac{6}{7}$ ,  $\frac{13}{21}$

**Answer:**  $\frac{2}{3}$ ,  $\frac{6}{7}$ ,  $\frac{13}{21}$



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5. Reciprocal of the fraction  $\frac{2}{3}$  is:

A. 2

B. 3

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

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

**Answer:**  $\frac{3}{2}$



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6. The product of  $\frac{11}{13}$  and 4 is:

A.  $3\left(\frac{5}{13}\right)$

B.  $5\left(\frac{3}{13}\right)$

C.  $13\left(\frac{3}{5}\right)$

D.  $13\left(\frac{5}{3}\right)$

**Answer:**  $13\left(\frac{5}{3}\right)$



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7. The product of 3 and  $4\left(\frac{2}{5}\right)$  is:

A.  $17\left(\frac{2}{5}\right)$

B.  $\frac{24}{5}$

C.  $13\left(\frac{1}{5}\right)$

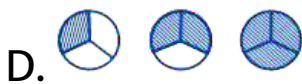
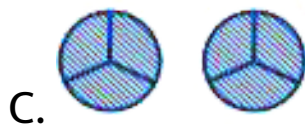
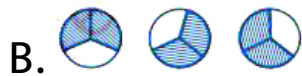
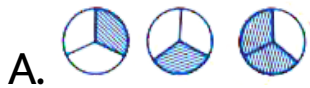
D.  $13\left(\frac{5}{3}\right)$

**Answer:**  $13\left(\frac{5}{3}\right)$



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8. Pictorial representation of  $3 \times \frac{2}{3}$  is:



**Answer:**



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9.  $\frac{1}{5} \div \frac{4}{5}$  equal to:

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

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

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

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

**Answer:**  $\frac{1}{4}$



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**10.** The product of  $0.03 \times 0.9$  is:

A. 2.7

B. 0.27

C. 0.027

D. 0.0027

**Answer: C**



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11.  $\frac{5}{7} / 6$  is equal to:

A.  $\frac{30}{7}$

B.  $\frac{5}{42}$

C.  $\frac{30}{42}$

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

**Answer:**  $\frac{6}{7}$



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12.  $5\left(\frac{1}{6}\right) / \frac{9}{2}$  is equal to:

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

B.  $\frac{1}{27}$

C.  $5\left(\frac{1}{27}\right)$

D.  $\frac{31}{27}$

**Answer:**  $\frac{31}{27}$



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13. Which of the following represents  $\frac{1}{3}$  of  $\frac{1}{6}$  ?

A.  $\frac{1}{3} + \frac{1}{6}$

B.  $\frac{1}{3} - \frac{1}{6}$

C.  $\frac{1}{3} \times \frac{1}{6}$

D.  $\frac{1}{3} / \frac{1}{6}$

**Answer:**  $\frac{1}{3} / \frac{1}{6}$



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14.  $\frac{3}{7}$  of  $\frac{2}{5}$  is equal to:

A.  $\frac{5}{12}$

B.  $\frac{5}{35}$

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

D.  $\frac{6}{35}$

**Answer:**  $\frac{6}{35}$



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15. One packet of biscuits requires  $2\left(\frac{1}{2}\right)$  cups of flour and  $1\left(\frac{2}{3}\right)$  cups of sugar. Estimated total quantity of both ingredients used in 10 such packets of biscuits will be:

- A. less than 30 cups
- B. between 30 cups and 40 cups
- C. between 40 cups and 50 cups
- D. above 50 cups

**Answer: above 50 cups**



16. The product of 7 and  $6\left(\frac{3}{4}\right)$  is:

A.  $42\left(\frac{1}{2}\right)$

B.  $47\left(\frac{1}{4}\right)$

C.  $42\left(\frac{3}{4}\right)$

D.  $47\left(\frac{3}{4}\right)$

**Answer:**  $47\left(\frac{3}{4}\right)$



17. On dividing 7 by  $\frac{2}{5}$ , the result is:

A.  $\frac{14}{2}$

B.  $\frac{35}{4}$

C.  $\frac{14}{5}$

D.  $\frac{35}{2}$

**Answer:**  $\frac{35}{2}$



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18.  $2\left(\frac{2}{3}\right) / 5$  is equal to:

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

B.  $\frac{40}{3}$

C.  $\frac{40}{5}$

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

**Answer:**  $\frac{8}{3}$



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19.  $\frac{4}{5}$  of 5 kg apples were used on Monday. The next day  $\frac{1}{3}$  of what was left was used. Weight (in kg) of apples left now is:

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

B.  $\frac{1}{14}$

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

D.  $\frac{4}{21}$

**Answer: C**

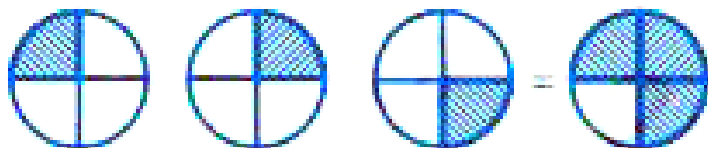


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20.

The

picture



interprets:

A.  $\frac{1}{4} / 3$

B.  $3 \times \frac{1}{4}$

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

D.  $3 / \frac{1}{4}$

**Answer:**  $3 \times \frac{1}{4}$





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21. Rani ate  $\frac{2}{7}$  part of a cake while her brother Ravi ate  $\frac{4}{5}$  of the remaining. Part of the cake left is \_\_\_\_\_



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22. The reciprocal of  $\frac{3}{7}$  is \_\_\_\_\_



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23.  $\frac{2}{3}$  of 27 is .....



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24.  $\frac{4}{5}$  of 45 is \_\_\_\_\_



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25.  $4 \times 6\left(\frac{1}{3}\right)$  is equal to \_\_\_\_\_



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26.  $\frac{1}{2}$  of  $4\left(\frac{2}{7}\right)$  is \_\_\_\_\_



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27.  $\frac{1}{9}$  of  $\frac{6}{5}$  is \_\_\_\_\_



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28. The lowest form of the product

$2\left(\frac{3}{7}\right) \times \frac{7}{9}$  is \_\_\_\_\_



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29.  $\frac{4}{5} / 4$  is equal to \_\_\_\_\_



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30.  $\frac{2}{5}$  of 25 is \_\_\_\_\_



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31.  $\frac{1}{5} / \frac{5}{6} = \frac{1}{5}$  \_\_\_\_\_  $\frac{6}{5}$



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**32.**  $3.2 \times 10 =$  \_\_\_\_\_



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**33.**  $25.4 \times 1000 =$  \_\_\_\_\_



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**34.**  $93.5 \times 100 =$  \_\_\_\_\_



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35.  $4.7 / 10 =$  \_\_\_\_\_



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36.  $4.7 / 100 =$  \_\_\_\_\_



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37.  $4.7 / 10000 =$  \_\_\_\_\_



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**38.** The product of two proper fractions is \_\_\_\_\_ than each of the fractions that are multiplied.



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**39.** While dividing a fraction by another fraction, we \_\_\_\_\_ the first fraction by the \_\_\_\_\_ of the other fraction.



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$$40. 8.4 / \text{ \_\_\_\_\_\_ } = 2.1$$



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$$41. 52.7 / \text{ \_\_\_\_\_\_ } = 0.527$$



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$$42. 0.5 \text{ \_\_\_\_\_\_ } 0.7 = 0.35$$



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43.  $2 \frac{\quad}{3} = \frac{10}{3}$



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44.  $2.001 \div 0.003 = \underline{\hspace{2cm}}$



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45. The reciprocal of a proper fraction is a proper fraction.



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**46.** The reciprocal of an improper fraction is an improper fraction



**Watch Video Solution**

**47.** Product of two fractions =  
$$\frac{\text{Product of their denominators}}{\text{Product of their numerators}}$$



**Watch Video Solution**

**48.** The product of two improper fractions is less than both the fractions



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**49.** A reciprocal of a fraction is obtained by inverting it upside down.



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**50.** To divide a decimal number by 1000, we move the decimal point in the number to the right by three places. (True/False)



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**51.** To divide a decimal number by 100, we move the decimal point in the number to the left by two places. (True/False)



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52. 1 is the only number which is its own reciprocal.



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53.  $\frac{2}{3}$  of 8 is same as  $\frac{2}{3} / 8$



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54. The reciprocal of  $\frac{4}{7}$  is  $\frac{4}{7}$



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**55.** If 5 is added to both the numerator and the denominator of the fraction  $\frac{5}{9}$ . Will the value of the fraction increase or decrease?



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**56.** What happens to the value of a fraction if the denominator of the fraction is decreased while numerator is kept unchanged?



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57. Which letter comes  $\frac{2}{5}$  of the way among A and J?



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58. If  $\frac{2}{3}$  of a number is 10, then what is 1.75 times of that number?



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**59.** In a class of 40 students,  $\frac{1}{5}$  of the total number of students like to eat rice only,  $\frac{2}{5}$  of the total number of students like to eat chapati only and the remaining students like to eat both. What fraction of the total number of students like to eat both?



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**60.** Renu completed  $\frac{2}{3}$  part of her home work in 2 hours. How much part of her home work

had she completed in  $1\left(\frac{1}{4}\right)$  hours?



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**61.** Reemu read  $\frac{1}{5}$  th pages of a book. If she reads further 40 pages, she would have read  $\frac{7}{10}$  th pages of the book. How many pages are left to be read?



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**62.** Write the number in the box such that [ ]

such that  $\frac{3}{7} \times [] = \frac{15}{98}$



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**63.** Will the quotient  $7\left(\frac{1}{6}\right) / 3\left(\frac{2}{3}\right)$  be a fraction greater than 1.5 or less than 1.5?



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**64.** Is  $\frac{13}{17}$  greater than 0.82?



**65. Health:** The directions for a pain reliever recommend that an adult of 60 kg and over take 4 tablets every 4 hours as needed, and an adult who weighs between 40 and 50 kg take only  $2\left(\frac{1}{2}\right)$  tablets every 4 hours as needed. Each tablet weighs  $\frac{4}{25}$  gram.

- (a) If a 72 kg adult takes 4 tablets, how many grams of pain reliever is he or she receiving?
- (b) How many grams of pain reliever is the

recommended dose for an adult weighing 46 kg?



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**66. Animals:** The label on a bottle of pet vitamins lists dosage guidelines.

What dosage would you give to each of these animals?

(a) a 18 kg adult dog

(b) a 6 kg cat

(c) a 18 kg pregnant dog

**Do Good Pet Vitamins**

- Adult dogs:  
 $\frac{1}{2}$  tsp (tea spoon full) per 9kg body weight
- Puppies, pregnant dogs, or nursing dogs:  
 $\frac{1}{2}$  tsp per 4.5kg body weight
- Cats:  
 $\frac{1}{4}$  tsp per 1kg body weight



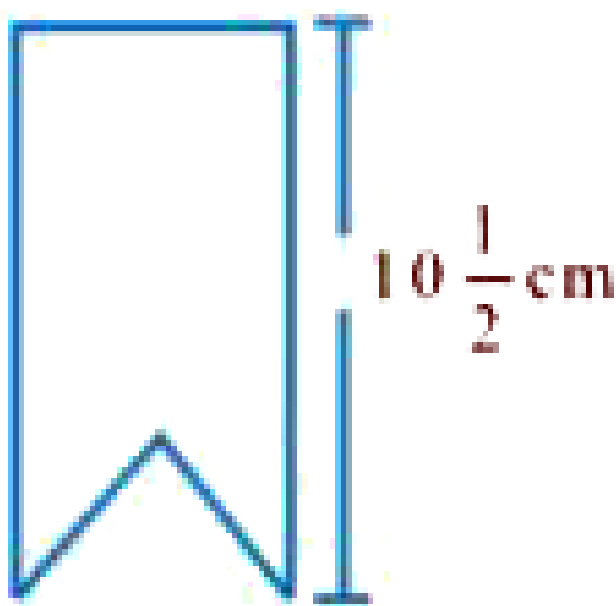
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67. How many  $\frac{1}{16}$  kg boxes of chocolates can be made with  $1\left(\frac{1}{2}\right)$  kg chocolates?



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**68.** Anvi is making bookmarker like the one shown in figure. How many bookmarker can she make from a 21 m long ribbon?



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**69.** A rule for finding the approximate length of diagonal of a square is to multiply the length of a side of the square by 1.414. Find the length of the diagonal when

(a) The length of a side of the square is 8.3 cm.

(b) The length of a side of the square is exactly 7.875 cm.



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**70.** The largest square that can be drawn in a circle has a side whose length is 0.707 times

the diameter of the circle. By this rule, find the length of the side of such a square when the diameter of the circle is

(a) 14.35 cm (b) 8.63 cm



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**71.** To find the distance around a circular disc, multiply the diameter of the disc by 3.14. What is the distance around the disc when the diameter is 18.7 cm?



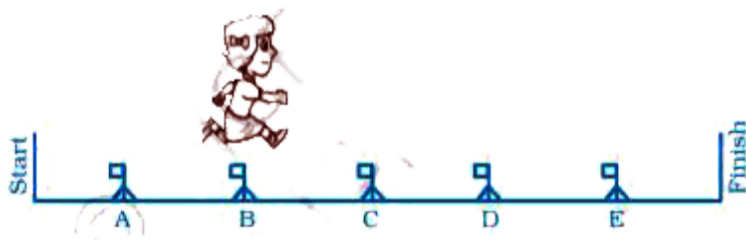
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**72.** What is the cost of 27.5 m of cloth at Rs 53.50 per metre?



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**73.** In a hurdle race, Nidhi is over hurdle B and  $\frac{2}{6}$  of the way through the race, as shown in Fig. 2.7.



Then, answer the following:

(a) Where will Nidhi be, when she is  $\frac{4}{6}$  of the way through the race?

(b) Where will Nidhi be when she is  $\frac{5}{6}$  of the way through the race?

(c) Give two fractions to tell what part of the race Nidhi has finished when she is over hurdle C.



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**74.** Diameter of Earth is 12756000m. In 1996, a new planet was discovered whose diameter is  $\frac{5}{86}$  of the diameter of Earth. Find the diameter of this planet in km.



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**75.** What is the product of  $\frac{5}{129}$  and its reciprocal ?



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76. Simplify:  $\frac{2\left(\frac{1}{2}\right) + \frac{1}{5}}{2\left(\frac{1}{2}\right) \div \frac{1}{5}}$



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77. Simplify:  $\frac{\frac{1}{4} + \frac{1}{5}}{1 - \frac{3}{8} \times \frac{3}{5}}$



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78. Divide  $\frac{3}{10}$  by  $\left(\frac{1}{4} \text{ of } \frac{3}{5}\right)$



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**79.**  $\frac{1}{8}$  of a number equals  $\frac{2}{5} / \frac{1}{10}$ . What is the number?



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**80.** Heena's father paid an electric bill of Rs 385.70 out of a 500 rupee note. How much change should he have received?



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**81.** The normal body temperature is  $98.6^{\circ}\text{F}$ . When Savitri was ill her temperature rose to  $103.1^{\circ}\text{F}$ . How many degrees above normal was that?



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**82.** Meteorology: One measure of average global temperature shows how each year varies from a base measure. The table shows results for several years.



Year	1958	1964	1965	1978	2002
Difference from Base	$0.10^{\circ}\text{C}$	$-0.17^{\circ}\text{C}$	$-0.10^{\circ}\text{C}$	$\left(\frac{1}{50}\right)^{\circ}\text{C}$	$0.54^{\circ}\text{C}$

See the table and answer the following:

(a) Order the five years from coldest to warmest.

(b) In 1946, the average temperature varied by  $-0.030^{\circ}\text{C}$  from the base measure. Between which two years should 1946 fall when the years are ordered from coldest to warmest?



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**83.** In her science class, Jyoti learned that the atomic weight of Helium is 4.0030, of Hydrogen is 1.0080, and of Oxygen is 16.0000. Find the difference between the atomic weights of:

(a) Oxygen and Hydrogen

(b) Oxygen and Helium

(c) Helium and Hydrogen



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**84.** Measurement made in science lab must be as accurate as possible. Ravi measured the length of an iron rod and said it was 19.34 cm long, Kamal said 19.25 cm, and Tabish said 19.27 cm. The correct length was 19.33 cm. How much of error was made by each of the boys?



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**85.** When 0,02964 is divided by 0.004, what will be the quotient?





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**86.** What number divided by 520 gives the same quotient as 85 divided by 0.625?



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**87.** A floor is 4.5 m long and 3.6 m wide. A 6 cm square tile costs Rs 23.25. What will be the cost to cover the floor with these tiles?



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**88.** Sunita and Rehana want to make dresses for their dolls. Sunita has  $\frac{3}{4}$  m of cloth, and she gave  $\frac{1}{3}$  of it to Rehana. How much did Rehana have?



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**89.** Sunita and Rehana want to make dresses for their dolls. Sunita has  $\frac{3}{4}$  m of cloth, and she gave  $\frac{1}{3}$  of it to Rehana. How much did Rehana have?



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**90.** How much cloth will be used in making 6 shirts, if each required  $2\left(\frac{1}{4}\right)$  m of cloth, allowing  $\frac{1}{8}$  m for waste in cutting and finishing in each shirt?

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**91.** A picture hall has seats for 820 persons. At a recent film show, one usher guessed it was  $\frac{3}{4}$  full, another that it was  $\frac{2}{3}$  full. The ticket

office reported 648 sales. Which usher (first or second) made the better guess?



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**92.** For the celebrating children's students of Class VII bought sweets for Rs 740.25 and cold drink for Rs 70. If 35 students contributed equally what amount was contributed by each student?



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**93.** The time taken by Rohan in five different races to run a distance of 500 m was 3.20 minutes, 3.37 minutes, 3.29 minutes, 3.17 minutes and 3.32 minutes. Find the average time taken by him in the races.

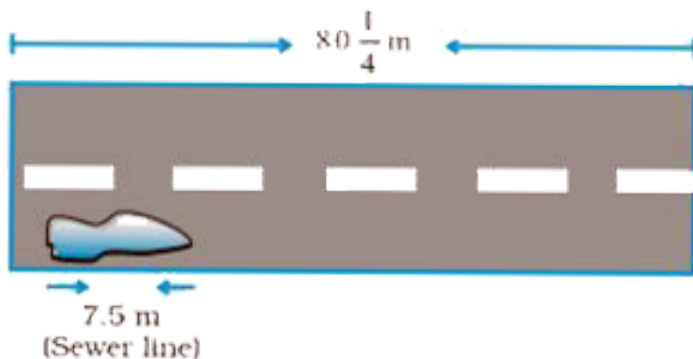


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**94.** A public sewer line is being installed along  $80\left(\frac{1}{4}\right)$  m of road. The supervisor says that the labourers will be able to complete 7.5 m in one day. How long will the project take to



complete?



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**95.** The weight of an object on moon is  $\frac{1}{6}$  its weight on Earth. If an object weighs  $5\left(\frac{3}{5}\right)$  kg on Earth, how much would it weigh on the moon?



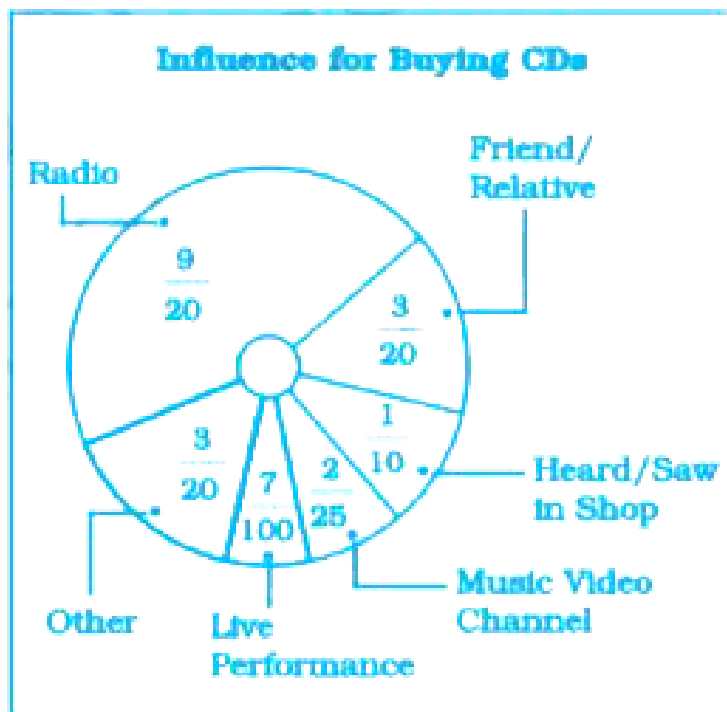
**96.** In a survey, 200 students were asked what influenced them most to buy their latest CD. The results are shown in the circle graph. ,

(a) How many students said radio influenced them most?

(b) How many more students were influenced by radio than by a music video channel?

(c) How many said a friend or relative influenced them or they heard the CD in a

shop?



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**97.** In the morning, a milkman filled  $5\left(\frac{1}{2}\right)$  L of milk in his can. He sold to Renu, Kamla and

Renuka  $\frac{3}{4}$  L each, to Shadma he sold  $\frac{7}{8}$  L and to Jassi he gave  $1\left(\frac{1}{2}\right)$  L. How much milk is left in the can?



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**98.** Anuradha can do a piece of work in 6 hours. What part of the work can she do in 1 hour, in 5 hours, in 6 hours?



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**99.** What portion of a 'saree' can Rehana paint in 1 hour if it requires 5 hours to paint the whole saree?



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**100.** Rama has  $6\left(\frac{1}{4}\right)$  kg of cotton wool for making pillows. If one pillow takes  $1\left(\frac{1}{4}\right)$  kg, how many pillows can she make?



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**101.** It takes  $2\left(\frac{1}{3}\right)$  m of cloth to make a shirt.

How many shirts can Radhika make from a piece of cloth  $9\left(\frac{1}{3}\right)$  m long?



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**102.** Ravi can walk  $3\left(\frac{1}{3}\right)$  km in one hour. How long will it take him to walk to his office which is 10 km from his home?



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**103.** Raj travels 360 km on three fifths of his petrol tank. How far would he travel at the same rate with a full tank of petrol?



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**104.** Kajol has Rs 75. This is  $\frac{3}{8}$  of the amount she earned. How much did she earn?



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**105.** It takes 17 full specific type of trees to make one tonne of paper. If there are 221 such trees in a forest, then what fraction of forest will be used to make 5 tonnes of paper.



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**106.** Simplify and write the result in decimal form :

$$\left(1/\frac{2}{9}\right) + \left(1/3\left(\frac{1}{5}\right)\right) + \left(1/2\left(\frac{2}{3}\right)\right)$$



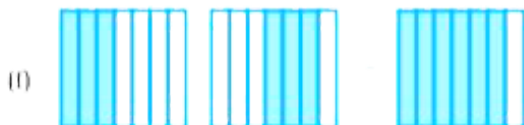
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**107.** Some pictures (a) to (f) are given below.

Tell which of them show:

- (i)  $2 \times \frac{1}{4}$ , (ii)  $2 \times \frac{3}{7}$ , (iii)  $2 \times \frac{1}{3}$ , (iv)  $\frac{1}{4} \times 4$ , (v)  $3 \times \frac{2}{9}$ , (vi)  $\frac{1}{4} \times 3$



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**108.** Evaluate :  $(0.3) \times (0.3) - (0.2) \times (0.2)$



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**109.** Evaluate:  $\frac{0.6}{0.3} + \frac{0.16}{0.4}$



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**110.** Find the value of

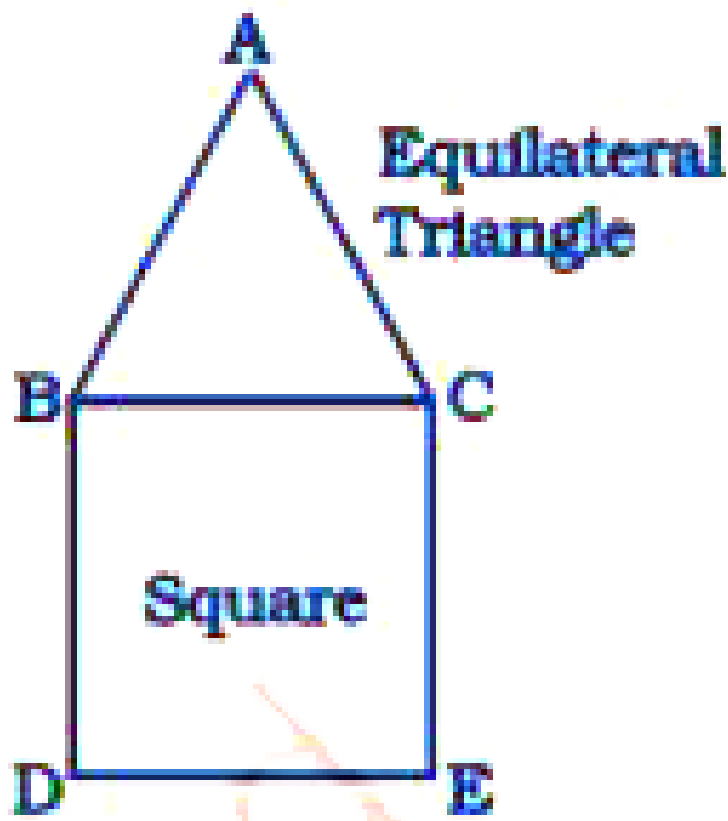
$$\frac{(0.2 \times 0.14) + (0.5 \times 0.91)}{0.1 \times 0.2}$$



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**111.** A square and an equilateral triangle have a side in common. If side of triangle is  $\frac{4}{3}$  cm long, find the perimeter of figure provided

below.



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**112.** Rita has bought a carpet of size  $4m \times 6\left(\frac{2}{3}\right)$  m . But her room size is  $3\left(\frac{1}{3}\right)m \times 5\left(\frac{1}{3}\right)m$ . What fraction of area should be cut off to fit wall to wall carpet into the room?



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**113.** Family photograph has length  $14\frac{2}{5}cm$  and breadth  $10\frac{2}{5}cm$ . It has border of uniform

will  $2\frac{3}{5}cm$ . Find the area of the framed photograph



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**114.** Cost of a burger is Rs  $20\left(\frac{3}{4}\right)$  and of Macpuff is Rs  $15\left(\frac{1}{2}\right)$ . Find the cost of 4 burgers and 14 macpuffs.



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**115.** A hill,  $101\left(\frac{1}{3}\right)$  m in height, has  $\frac{1}{4}$  th of its height under water. What is the height of the hill visible above the water?



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**116.** Sports: Reaction time measures how quickly a runner reacts to the starter pistol. In the 100 m dash at the 2004 Olympic Games, Lauryn Williams had a reaction time of 0.214 second. Her total race time, including reaction

time, was 11.03 seconds. How long did it take her to run the actual distance?



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**117.** State whether the answer is greater than 1 or less than 1. Put a ' $>$ ' or ' $<$ ' mark in appropriate box.

Questions	Greater than 1	Less than 1
$\frac{2}{3} \div \frac{1}{2}$		
$\frac{2}{3} \div \frac{2}{1}$		
$6 \div \frac{1}{4}$		
$\frac{1}{5} \div \frac{1}{2}$		
$4\frac{1}{3} \div 3\frac{1}{2}$		
$\frac{2}{3} \times 8\frac{1}{2}$		





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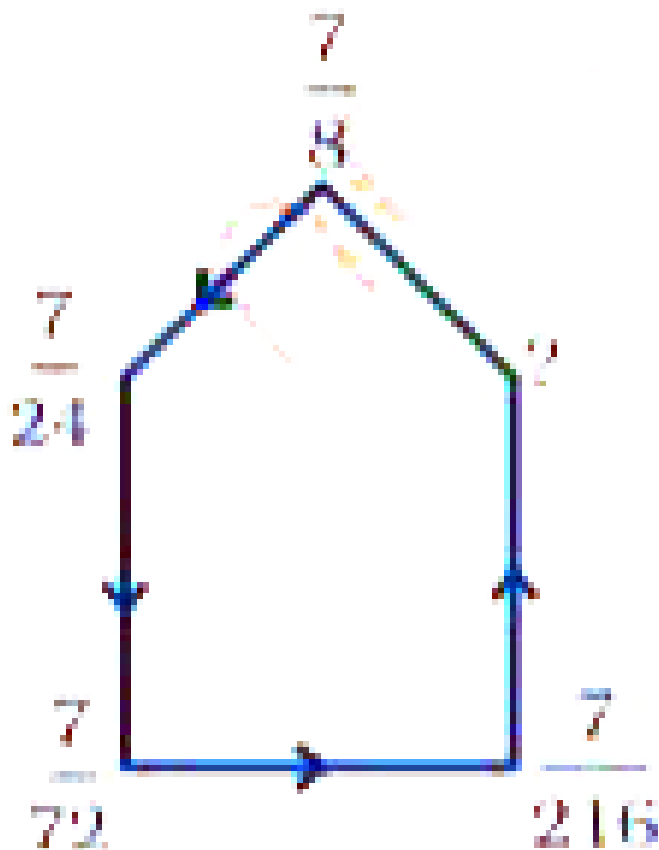
**118.** There are four containers that are arranged in the ascending order of their heights. If the height of the smallest container given in the figure is expressed as  $\frac{7}{25}x = 10.5$  cm.

Find the height of the largest container.



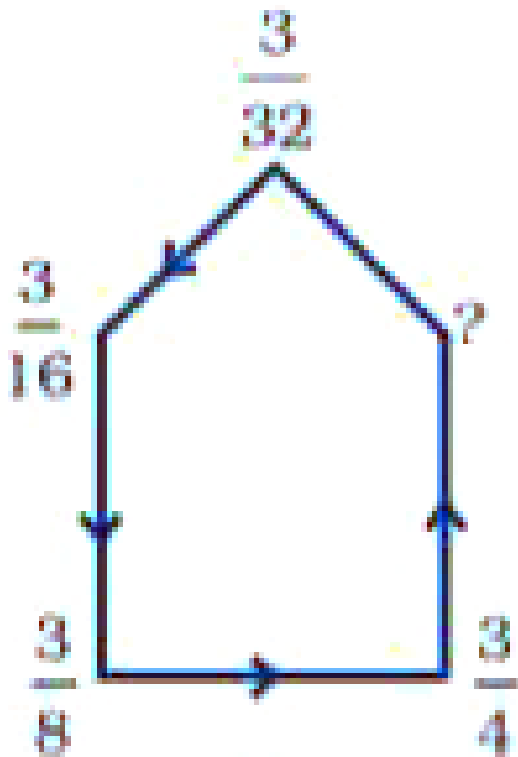
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119. replace '?' with appropriate fraction.



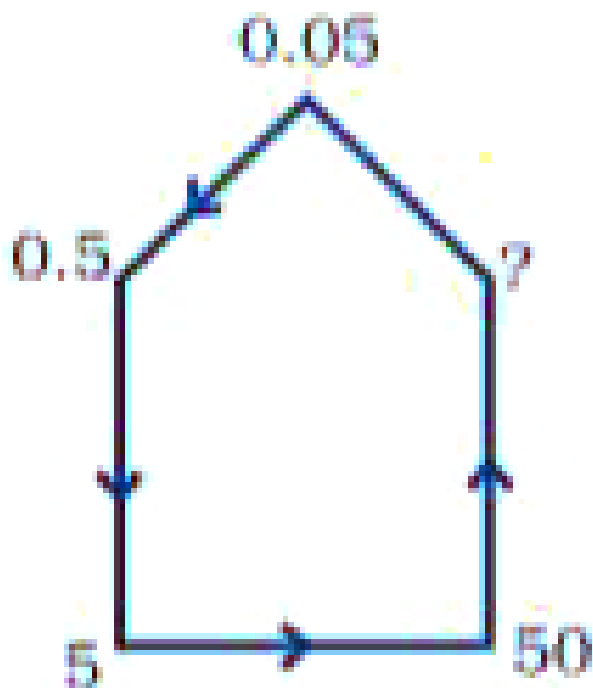
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120. replace '?' with appropriate fraction.



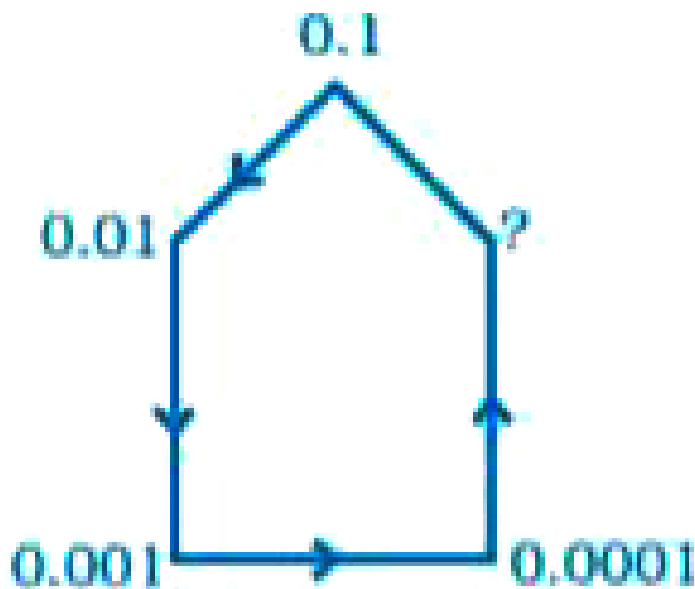
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121. replace '?' with appropriate fraction.



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122. replace '?' with appropriate fraction.



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Exercise Find The Error

1. A student compared  $-0.25$  and  $-0.3$ . He wrote, "Since  $0.3$  is greater than  $0.25$ ,  $-0.3$  is greater than  $-0.25$ ". What was the student's error?



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2. A student multiplied two mixed fractions in the following manner:

$2\left(\frac{4}{7}\right) \times 3\left(\frac{1}{4}\right) = 6\left(\frac{1}{7}\right)$ . What error the student has done?



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3. In the pattern  $\frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \dots$  which fraction makes the sum greater than 1 (first time)? Explain.



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