



INDIAN SCHOOL AL WADI AL KABIR

Class VII

Mathematics (2026-27)

Worksheet DTQ –WORKING WITH FRACTIONS

DESCRIPTIVE TYPE QUESTIONS

- Q1.** Write the answer in its simplest form: $6\frac{2}{3} \times \frac{7}{5}$.
- Q2.** Find the value of $\frac{5}{8}$ of $9\frac{2}{3}$
- Q3.** Which value is greater? $\frac{2}{5}$ of $2\frac{1}{2}$ or $\frac{3}{7}$ of $1\frac{3}{4}$?
- Q4.** If one sheet of paper is $\frac{3}{4}$ cm thick, What will be the thickness of a stack containing 80 sheets?
- Q5.** Tina feeds her birds exactly $1\frac{5}{6}$ small measuring cups of bird food each time. If she has fed them exactly $27\frac{1}{2}$ cups till date. How many times has she given food to the birds?

Q6. A juice bar manager is preparing three different fruit pinch recipes for an event. The table below shows the quantity of pure fruit juice concentrate needed to make one batch of each recipe and the size of the container used to serve it.

Recipe	Concentrate per batch	Serving container volume
Berry Blast	$2\frac{1}{4}$ litres	$\frac{3}{16}$ litres
Citrus Splash	$3\frac{1}{2}$ litres	$\frac{1}{4}$ litres
Tropical Mix	$1\frac{4}{5}$ litres	$\frac{3}{10}$ litres

- If the manager makes $3\frac{1}{3}$ batches of Berry Blast, how many litres of fruit juice concentrate will be used in total?
- For a single batch of Tropical Mix, how many individual serving containers can be completely filled?
- The manager has 14 litres of Citrus Splash concentrate. Is this enough to prepare 4 batches? Justify your answer with calculations.

Match the fraction expression in column A with its correct simplified value in Column B:

	Column A (Expression)	Column B (Result)
Q7.	i) $6\frac{2}{3} \times \frac{7}{5}$	a) $\frac{8}{21}$

	Q8.	ii) $\frac{5}{8}$ of $9\frac{2}{3}$	b) $\frac{21}{5}$ or $4\frac{1}{5}$	
	Q9.	iii) $33\frac{4}{7} \div 11$	c) $\frac{28}{3}$ or $9\frac{1}{3}$	
	Q10.	iv) $2\frac{4}{5} \div \frac{2}{3}$	d) $\frac{145}{24}$ or $6\frac{1}{24}$	
	Q11.	v) $2\frac{2}{3} \div 7$	e) $\frac{235}{77}$	

Q12.	Rocky has a garden. Its length is $\frac{3}{4}$ km and its width is $\frac{1}{4}$ km. i) What is the area of the garden? ii) Rocky wants to make a new garden with the same length $\frac{3}{4}$ km and an area of $\frac{9}{20} \text{ km}^2$. Find the width of the new garden in its simplest form			
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Q13.	CASE STUDY: A suburban family depends on an overhead water storage tank with a capacity of 500 litres to meet its daily household water requirements. The family is conscious of water conservation and records how the stored water is distributed among three important activities. On a particular day, the family uses: Kitchen preparation: $\frac{1}{4}$ of the total water Bathing and washing clothes: $\frac{3}{10}$ of the total water Watering the garden: $\frac{9}{20}$ of the total water Based on the above information, answer the following: i) How many litres of water are used for kitchen preparation? ii) How many litres of water are used for bathing and washing clothes? iii) How many litres of water are used for watering the garden? iv) How many litres of water are used for bathing and washing clothes and watering the garden together?			
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ANSWERS				
Q1.	$\frac{28}{3}$	Q2.	$\frac{145}{24}$ or $6\frac{1}{24}$	Q3. $\frac{2}{5}$ of $2\frac{1}{2}$ is greater
Q5.	15	Q6.	$7\frac{1}{2}$ litres, 6 containers, yes	Q7. c
Q9.	e	Q10.	b	Q11. a
Q12.	ii) $\frac{3}{5}$ km	Q13.	i) 125 litres	Q13. ii) 150 litres
				Q13. iii) 225 litres iv) 375 litres