

WORK SHEET
SECOND TERM
SUBJECT- MATHEMATICS
CLASS- VI

CHAPTER 7 - FRACTIONS

Q.1 What fraction is:

- a) 6 hours of a day
- b) 70 mm of a km
- c) 290 ml of a liter

Q.2 Write in ascending order

- a) $\frac{3}{5}, \frac{4}{5}, \frac{2}{5}, \frac{9}{5}, \frac{1}{5}$
- b) $\frac{8}{11}, \frac{8}{9}, \frac{8}{15}, \frac{8}{18}, \frac{8}{13}$

Q.3 Add the following:

- a) $\frac{13}{5}, \frac{4}{5}, \frac{22}{5}$
- b) $\frac{6}{7}, \frac{5}{7}, \frac{3}{7}$
- c) $\frac{2}{7}, \frac{9}{11}$

Q.4 Rohit and Rahul have study tables of the same size .Rohit used $\frac{5}{6}$ of its space and Rahul used $\frac{2}{5}$ of its space. Whose study table is more occupied and by what fraction?

Q.5 .a) Is $\frac{4}{5}$ equal to $\frac{5}{9}$?

b) Is $\frac{8}{60}$ is equal to $\frac{1}{15}$?

Q.6 Write three equivalent fractions of:

- a) $\frac{2}{5}$
- b) $\frac{1}{7}$
- c) $\frac{5}{11}$
- d) $\frac{6}{23}$

Q.7 Mika was given $\frac{2}{9}$ of a pack of toffees. What fraction of toffees was left in the pack?

Q.8 Compute:

- a) $\frac{23}{67} - \frac{21}{67}$
- b) $\frac{11}{23} - \frac{9}{23} + \frac{13}{23}$

Q.9 Nitin bought a piece of rope $\frac{11}{8}$ m in length. He uses $\frac{1}{4}$ of it. What is the length of the piece left?

CHAPTER- 8 (DECIMALS)

Q.1 Write as decimals:

- i) Three ones and 2-tenths ii) Sixty and 3-tenths iii) Nineteen and 9-tenths
iv) One hundred six and 5-tenths

Q.2. Write each of the following as decimals:

- i) $\frac{6}{10}$ ii) $300+50+3+\frac{1}{10}+\frac{3}{10}$ iii) $6\frac{2}{5}$

Q.3. Express as fraction:

- i) 61.2 ii) 6.4 iii) 0.05 iv) 2.4 v) 2.56

Q.4. Express the following as kilometers (km) using decimals:

- i) 2m ii) 16m iii) 530m iv) 915m v) 830m

Q.5. Express as Rupees using decimals:

- i) 120paise ii) 450paise iii) 7paise iv) 500paise v) 6 rupees 70 paise

Q.6. Express as kilogram (kg) using decimals:

- i) 5g ii) 305g iii) 6325g iv) 2 kg 65g v) 7 kg 750g

Q.7. Find the sum of:

- i) 25.43, 6.735 and 39 ii) 0.3, 6.2 and 8.932 iii) 4.003, 2.65 and 7.1

Q.8. Find the value of:

- i) $8.735-6.27$ ii) $99.009-19.9$ iii) $1000-27.35$

Q.9. Simplify:

- i) $3.2 \times 2.65 \times 1.05$ ii) 639.5×0.05 iii) 888.88×80.08

CHAPTER – 9 (DATA HANDLING)

Q.1 Marks scored by students (out of 50) in a General Knowledge test are as follows:

40,43,45,39,41,50,45,44,40,43,42,40,45,50,50,49,48,40,30,42,43,50,49,47,48,42,45,41

(Draw frequency table)

Q.2 Smita rolled a dice 35 times and recoded the observation as follows :


3,6,1,2,6,3,4,5,4,4,3,1,2,1,2,6,5,2,6,5,3,1,2,3,4,6,5,4,1,6,5,5,3,2,3

Make a frequency table using tally marks & answer the following

- i.) Which number appeared the maximum number of times?
ii.) Which number appeared the minimum number of times?

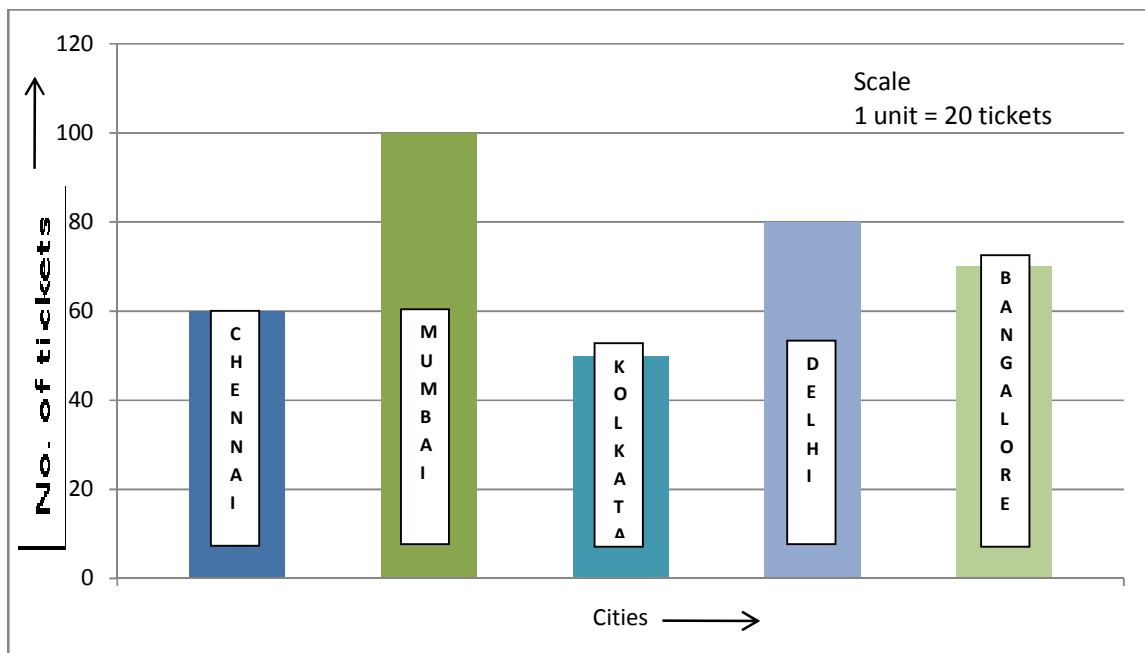
Q.3 Total number of students of a school in different years is given below:

Year	2001	2002	2003	2004	2005	2006
No of Students	450	600	850	1050	1250	1800

Prepare a pictograph using  =100 students.

Q.4 Draw a pictograph to represent the following information:

Year	2002	2003	2004	2005	2006
No of Saplings planted	70	90	120	150	180



Q 5. Read the above Bar Graph & answer the following

- What Information does the above bar graph give?
- Find the total number of tickets to be sold in five cities.
- In which city the maximum numbers of tickets were sold?
- Find the difference of tickets sold in Bangalore & Kolkata.

Q.6 The following table shows the number of students of different ages participating in 'environment protection programme' on the world environment day. Draw a bar graph using the given information:

Age (in years)	8	9	10	11	12	13
Number of Students	550	350	400	375	425	575

CHAPTER – 10 (MENSURATION)

- Find the perimeter of a rectangle whose length and breadth are 20m and 16.5m respectively.
- Find the perimeter of a square whose side is 6.5cm.
- Find the cost of fencing a park of length 200m and breadth 150m at the rate of Rs.33per meter.
- How many rectangles can be drawn with perimeter as 28cm, given that the sides are positive integers in cm?
- A marble tile measures 25cm by 20cm. How many tiles will be required to cover a floor of size 5m by 4m?
- Find the perimeter of a rectangle whose area is 500 sq. cm. and breadth is 20cm.
- The area of a square field is 225 sq. m. Find the length of its side.
- The length and breadth of a rectangular park are in the ratio 4:3. Its area is 2352 sq. m. What is the length and breadth of the field?
- The sides of a triangle are in the ratio 3:4:5. If the perimeter of a the triangle is 180cm. what are its side?

CHAPTER – 11 (ALGEBRA)

Q.1 Write algebraic expression for the following:

- i) 6 times y to which 2 is added. ii) $-C$ divided by 9. iii) 11 subtracted from two times x.
iv) x multiplied by itself three times. v) Three times a number s subtracted from 22.

Q.2. Write the next two numbers in each of the following number patterns:

- i) 5, 11, 23, 47, ----, ---- ii) 243, 81, 27, ----, ---- iii) 10, 30, 90, 270, ----, ----
iv) 16, 23, 30, 37, ----, ---- v) 3, 5, 8, 12, ----, ----

Q.3. Which of the following are equations?

- i) $6x - 7 > 12$ ii) $2x + 3 = 9$ iii) $\frac{7a}{11} < 19$ iv) $\frac{-5b}{8} = 2$
v) $3a + 7 < 8$ vi) $\frac{m}{3-5} = 9$

Q.4. Solve the equations by trial & error method:

- i) $3x + 7 = 25$ ii) $7y = 84$ iii) $3m - 6 = 15$

Q.5. If Vidushi's present age is x years:

- i) What will be her age 5 years from now? ii) What was her age 2 years ago?
iii) Her grandmother's age is 7 times her age. What is her grandmother's age?

CHAPTER- 12 (RATIO AND PROPORTION)

Q.1. Express as ratios:

- i) 2 km to 6 km ii) 8 g to 120 g iii) 6 hr to 1 day
iv) 5 m to 650 cm v) Rs. 3 to 600 p

Q.2. In a class there are 25 boys and 35 girls. Find the ratio of:

- i) number of boys to the number of girls.
ii) number of girls to the total number of students.

Q.3. Write two equivalent ratio of:

- i) 3:5 ii) 11:8 iii) 6:4 iv) 2:7

Q.4. Divide 20 pens between Samiara and Raima in the ratio 3:2.

Q.5. Determine if the following are in proportion:

- i) 32, 48, 70, 210 ii) 25, 30, 40, 48 iii) 45, 60, 12, 15

Q.6. Find 'a' if:

- i) $a : 30 :: 7 : 15$ ii) $12 : a :: 96 : 160$ iii) $72 : 32 :: a : 144$

Q.7. A cricket set contains 3 balls and 2 bats. Can 24 balls and 8 bats be made into complete sets?

Q.8. 6 packets of pens cost Rs. 120. How many packets can be bought in Rs. 360?

Q.9. A worker is paid Rs. 162.50 for 5 days. What should be paid to him for 29 days.

CHAPTER 13 & 14 (SYMMETRY & PRACTICAL GEOMETRY)

1. Which of the digits from 0 to 9 have lines of symmetry? Draw them.

2. Write four letters of the English alphabet that have both vertical and horizontal lines of symmetry.

3. Draw a regular polygon that has five lines of symmetry.

4. Draw a kite and draw its line of symmetry.

5. Write 'True' or 'False' for the following statements.

- a. A circle has infinite number of lines of symmetry.
b. A scalene triangle has one line of symmetry.
c. A square has two lines of symmetry.
d. A kite has one line of symmetry.
e. A rhombus has four lines of symmetry.

6. Draw a semicircle of radius 5.8 cm.

7. Using a protractor draw an angle of 75° . Draw the angle bisector of this angle.

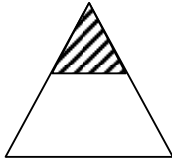
8. Draw any line segment AB and take a point P outside it. Construct a perpendicular on AB passing through P.

9. Draw a line segment AB = 9 cm. Using compass find a point C on it such that AC = BC.

10. Draw a line AB and a point C on it. Draw a line CD perpendicular to AB.

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1. Show $\frac{0}{6}, \frac{1}{6}, \frac{1}{2}, \frac{1}{3}, 1$ on the number line.
2. Convert (i) $\frac{25}{6}$ into mixed fraction and (ii) $3\frac{4}{5}$ into improper fraction.
3. Are $\frac{3}{4}, \frac{5}{6}, \frac{7}{8}$ equivalent fractions? Give reason.
4. Show this pictorially (i) $\frac{1}{3} + \frac{2}{3}$ (ii) $\frac{4}{5} - \frac{1}{5}$
5. Convert $\frac{48}{112}$ into the simplest form.
6. Write the first five equivalent fraction of $\frac{4}{5}$.
7. Correct the given figure, shaded portion is $\frac{1}{2}$ of the given figure.



8. Give an improper fraction:
 - (i) Whose denominator is 4 less than the numerator?
 - (ii) Whose numerator & denominator add upto 10?
 - (iii) Difference between numerator and denominator is 12.
9. Arrange in the ascending order :
 - (i) $\frac{3}{8}, \frac{3}{5}, \frac{3}{11}, \frac{3}{6}, \frac{3}{2}$
 - (ii) $\frac{9}{11}, \frac{5}{11}, \frac{3}{11}, \frac{10}{11}, \frac{8}{11}$
 - (iii) $\frac{1}{3}, \frac{3}{8}, \frac{5}{6}, \frac{1}{2}, \frac{5}{4}$
10. Write in the place value chart (i) 308.758 (ii) 25.99
11. Write each of the following as decimals.
 - (i) $\frac{5}{2}$
 - (ii) $\frac{8}{5}$
 - (iii) $200 + 60 + \frac{1}{10} + \frac{3}{100}$
 - (iv) $3\frac{3}{5}$
12. Write as fraction and then reduce it to the lowest form (i) 3.8 (ii) 31.4
13. Write (i) 108.56 (ii) 5.008 in words.
14. Fill in the banks using <, >, =.
 - (i) 0.099 0.19
 - (ii) 2.542 2.501
 - (iii) 1.5 1.50
15. Express :
 - (i) 75 paise as rupees
 - (ii) 60 cm as metre
 - (iii) 11cm 5mm as cm
 - (iv) 85 km 7m as km
 - (v) 62kg 70g as kg
17. By how much is the difference of 208 & 802.28 less than their sum?

18. What should be added to the difference of 3.14 & 1.673 to get 11 ?
19. Sameer spent $\frac{2}{4}$ of his pocket money on a movie and $\frac{2}{5}$ on a new pen. What fraction of his pocket money did he spend?
20. The horticulture department made a table to show the number of trees of different types planted inside the garden and public buildings of a city.

Name of tree	No. of trees
Neem	22
Coconut	35
Banyan	20
Mango	42
Christmas	27

Prepare a pictograph to represent the above data.

21. The following table shows the marks obtained by Aziz in Annual Examination in different subjects.

Subject	Marks
Hindi	85
English	72
Maths	98
Science	89
SST	70

Prepare a bar graph to represent the above information.

22. A rectangle is 25m long and 16m broad. Find the side of a square whose area is equal to the area of the rectangle.
23. Find the area of a square of side 36cm in terms of square metre.
24. On a squared paper, sketch the following :
 - (i) A hexagon with exactly two lines of symmetry.
 - (ii) A quadrilateral with a horizontal line of symmetry but no vertical line of symmetry.
25. Draw any segment \overline{PQ} Take a point X not on it. Through X, draw a perpendicular to \overline{PQ}
26. Draw an angle of 135° and divide it into four equal parts using compass.
27. Construct with ruler and compass, angles of the following measures –
 - (i) 30° (ii) 90° (iii) 75° (iv) 45° (v) 105°
28. Draw angle bisector of 150° .
29. Make a copy of 80° using ruler and compass.
30. Divide Rs. 3500 among A, B and C in the ratio 3:2:2.
31. If a dozen pens cost Rs. 15. How many pens can be bought for Rs. 43.75?
32. Find 'a' if $12 : a :: 96 : 160$.
33. Find the ratio of 5 minutes to 40 seconds.

34. An engineer earns Rs. 60,000 per month. His monthly expenditure is Rs. 45,000. Find the ratio of –
- his expenditure to his saving
 - his income to his expenditure
 - his income to his savings
37. Mother wants to divide Rs. 380 between her daughter Divyangi & Shubhangi in the ratio of their ages. If the age of Divyangi is 9 yrs. and age of Shubhangi is 10 yrs. Find how much Divyangi and Shubhangi will get?
38. Present age of father is 42 years. and that of son is 14 years. Find the ratio of :
- Present age of father to the present age of son.
 - Age of father to the age of son when father was 30 yrs. old.
 - Age of father to the age of son, when son was 12 yrs old.
39. How many tiles with dimensions 12cm and 5cm will be needed to fit a region whose length and breadth are 144cm and 100 cm respectively?
40. The length and breadth of a rectangular park are 615m and 55m respectively. Find the cost of fencing the park at the rate of Rs. 9.25 per metre.
41. Find the side of a square, if its area is 324 m^2 .
42. Find the rule which gives the number of match stick required to make a pattern of letter Z.
43. State with reason which of the following are equations :
- $(x - 5) > 8$
 - $7 = (11 \times 5) - (12 \times 4)$
 - $20 = 5Y$
 - $7 - x = 5$
44. Choose the value of 'x' from the value given in the bracket.
- $x + 5 = 14$ (19, 9, -5, 0)
 - $6x = 48$ (42, 6, 8, 7)
45. Give expression for the following cases –
- 'n' multiplied by 2 and 1 subtracted from the product.
 - The property of associativity of addition of numbers by using variables a, b and c.
46. Change the following statement using expression into statement in ordinary language.
'Jagya is z years old. His uncle is 4z years old and his aunt is $(4Z - 3)$ years old.
47. What is the other name for line of symmetry of circle.
48. Complete the following table.

Shape	No. of lines of symmetry
Equilateral Δ	
Square	
Rectangle	
Isosceles Δ	

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