Decimals

I. **Fill in the blanks:**

1. A decimal mixed number is made up of a whole number and a ________________.
2. ________________ is the place next to the tenths which is one of 100 equal parts of a whole.
3. Decimal fractions having the same number of decimal places are called ________________.
4. Two or more decimal fractions are called ________________ if they have equal number of decimal places.
5. Unlike fraction decimals which are equal in value are called ________________ fractions.
6. We can change unlike decimal fraction to like decimals by ____________ as many zeroes as required.
7. To convert a decimal fraction into a fractional number, we write ______ in the denominator followed by as many zeros as the decimal places.
8. To convert a fraction to a decimal number, we count an equal number of places in the numerator starting from the ________ digit, then place the decimal.
9. After multiplying two decimal numbers to place decimal point, counting must always be done from the ________________ place of the product.
10. The product of a decimal fraction and ____________ is the decimal itself.
11. The ________________ of a decimal fraction and zero is zero.
12. The ________________ of a decimal and a whole number multiplied in any order remains the same.
13. When the number of digits in the dividend is less and the division is not complete, keep ________________ at every step till the division is complete.
14. While dividing a decimal by 10, 100 or 1000 etc., the decimal shifts to the ________ by as many places as there are zeroes in the divisor.

15. The denominator of reciprocal of any whole number is __________.

II. **Add the following:**
   
   1. 1001.002; 8005.007; 15.942
   2. Rs.298.50; Rs.37.75; Rs.1297.25
   3. 307Kg 250g; 242Kg 130g; 50Kg 500g
   4. 2040.20 Km; 20.502Km 783.55 Km 10.57 Km

III. **Subtract the following:**
   
   1. Subtract Rs.529.25 from Rs.872.50
   2. Subtract 89 Kg 750 g from 910 Kg 500 g
   3. 89.435l from 29l
   4. 298.25m from 313.29m

IV. **Fill in the blanks:**
   
   1. 24.2 x 2 = __________
   2. 2.194 x 1000 = __________
   3. 0.9 x 9 = __________
   4. 0.8 x 0.8 = __________
   5. 0.111 x 0.003 = __________
   6. 14.4 ÷ 12 = __________
   7. Reciprocal of 81 = __________
   8. 6/8 = __________ (using decimal point)
   9. 49/50 = __________
   10. 11/20 = __________
V. **Find the product:**
1. 184.95 \times 3.21
2. 800.09 \times 0.999
3. 809.76 \times 54.3
4. 948.9 \times 30.3

VI. **Find the quotient:**
1. 316.84 \div 8
2. 0.00049 \div 490
3. 0.00909 \div 90
4. 6700.67 \div 67
5. 1438.01 \div 1000
6. 4235.7 \div 700
7. 6472.248 \div 80
8. 1.3325 \div 2.5
9. 2436.48 \div 0.12
10. 489.6 \div 2.4

VII. **Write the statement and Solve the following application problems:**
1. A labourer gets daily wage of Rs.150.75. Find the wages of 200 labourers.
2. Mr. Lal’s vehicle uses 96.6 litres of petrol in a fortnight. How many litres of petrol is consumed per day by his vehicle?
3. Neha bought 5 kg apples for Rs.125.75 and Priya bought 6 kg apples for Rs.150.60. Who paid less and by how much for each kilogram?

---

**Percentage**

I. **Fill in the blanks:**
1. The word ‘cent’ means ________.
2. To convert a fraction into percentage, we multiply by ________.
3. If a fraction has 100 as the denominator, then its numerator can be expressed as a ________.
4. To convert a percentage into a decimal, divide by ________ or move the decimal point ________ places to the left of the numeral.
II. Find:

a. 75% of 250.

b. 10% of 150

c. 55% of 1200 marks

d. 12.5% of 24 ml

III. which of the two is more?

a. 25% of 300 or 15% of 400?

b. 15% of 80 or 18% of 90?

IV. Write as percentage:

a. Five hundredths

b. 79 hundredths

c. 88/100

d. 7/100

V. what % is:

a. 2 ½ of 40

b. 20 of 78

c. 15 of 75

d. 25 of 250
VI. Write the statements and solve the following application problems:

1. The population of a village is 3200. If 55% were children and men, find the number of women.

2. In an examination, Suhail scored 85% marks out of 500 marks. How many marks did he get?

3. In a vehicle 80 people were travelling. Out of which 30 were standing. What per cent of the people were seated?

**Average**

I. FILL IN THE BLANKS:

1. The _____________is a measure for characterising a group of numbers with one number.

2. Sum of items is equal to___________ multiplied by the number of items.

3. Average of first five whole numbers is ________________.

4. The average of the first three odd numbers is ________________.

5. While finding the averages of numbers, ensure that they must have the same______.

6. The average of the prime numbers greater than 10 and less than 20 is ________________.

7. Total quantities ÷ No. of quantities = ________________

II. WORK OUT THE FOLLOWING:

1. Find the average of first ten natural numbers.

2. Find the average of first five whole numbers.

3. The average height of 5 trees in a row is 150 cm. If the height of 4 trees is 153, 150, 151, & 152, find the height of the fifth tree.
4. The total sale in a restaurant for a week is Rs.9980.00. What is the average sale per day?

III. Fill in the blanks:

<table>
<thead>
<tr>
<th>No of Items</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td></td>
<td>600</td>
<td>30</td>
</tr>
<tr>
<td>42</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>132</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>800</td>
<td></td>
</tr>
</tbody>
</table>

**Triangles**

I. Fill in the blanks:

1. A triangle has ________ sides, ________ angles and ______ vertices.

2. A triangle whose one angle is equal to 90° is called ________ triangle.

3. A triangle with all three sides equal is called as an ________ triangle.

4. A triangle whose two sides are equal is called ________ triangle.

5. _______ symbol stands for a triangle.

6. A _______ triangle may be scalene, isosceles or equilateral.

7. The ________ is the longest side of a right angled triangle and it is the side opposite to the right angle.
8. A triangle can have _________ right angle.

9. A triangle can have _________ obtuse angle.

10. The sum of lengths of any two sides of a triangle is always _________ than the third side.

11. In a triangle, the side opposite to the right angle is called _________.

12. In an _________________ triangle, the side opposite to the equal sides are equal.

II. Say whether the following statements are true or false.

1. The hypotenuse is the longest side of a right angled triangle. _________

2. All the angles of an equilateral triangle are equal. _________

3. A triangle is formed by joining three collinear points. _________

4. In an isosceles triangle, all the three sides will be equal. _________

5. The sum of all the three angles in a triangle is 180°. _________

6. A triangle whose any two sides are equal is called an isosceles triangle. _________

7. A triangle can have two obtuse angles. _________

III. Find the missing angles:

1. 35° + 55° + ?

2. 25° + 80° + ?

3. 35° + 68° + ?

4. 86° + 38° + ?
IV. Which of the following can be the measures of three angles of a triangle?

1. 60°, 90°, 30°
2. 45°, 35°, 75°
3. 115°, 35°, 40°
4. 98°, 45°, 45°

V. Classify the following triangles into equilateral, isosceles or scalene triangle:

1. AB = 4cm BC = 4cm CA = 3.5cm
2. AB = 5.5cm BC = 3.4cm CA = 4.6 cm
3. AB = 4.5 cm BC = 4.5cm CA = 4.5cm

VI. Find the perimeter of a triangle when its sides are:

1. PQ=5.6cm, QR=3.9cm, RP=4.9cm
2. AB=4.3cm, BC=4.8cm, CA=3.9cm
3. XY=5.6cm, YZ=8.9cm, ZX=7.2cm

VII. Is it possible to have a triangle with the following sides?

1. 7cm, 4cm, 5cm
2. 14cm, 4cm, 10cm
3. 8cm, 5cm, 4cm