

## 7<sup>th</sup> – Decimals

**Decimal numbers:** Whose denominator is 10 or 100 or 1000 or 10000...etc is called a decimal fraction. For example  $\frac{2}{10}$ ,  $\frac{3}{100}$  etc are all decimal fractions. If these numbers are written by using a decimal point, then they are called decimal numbers or simply decimals.

1. Arrange in ascending order: 2.01, 1.9, 0.95, 3.2, 2.758.
2. Add: 3.01, 2.58 and 6.9.
3. Subtract: 8.96 from 25.1.
4. Shilpa bought 3.500 kg potatoes, 1.095 kg tomatoes and 8.875 kg carrots. How much vegetable did she buy?
5. Arrange in descending order: 7.8, 8.7, 17.5, 4.93, 3.12
6. Karina has Rs 45.65. She gets Rs 15.80 from her father. How much balance will she have if she spends Rs 39.50 on lunch?
7. Mukesh has 30.5 liters' petrol in his car. He drove his car and used 18.95 liters' petrol. How much petrol will he need to fill the tank if it can hold 45 liters'?

### Multiplication of decimals by a whole number

1. Multiply:  
(a)  $6.893 \times 10$       (b)  $43.85 \times 10$       (c)  $9.05 \times 100$       (d)  $473.2 \times 100$   
(e)  $1.3 \times 0.8$       (f)  $19.08 \times 1000$       (g)  $20.76 \times 1000$       (h)  $1.765 \times 100$
2. Find the mass of 0.6 liters of water if mass of each liter of water is 1.005 kg.
3. Suniti bought 2.25m cloth for her dress at Rs 75 per meter. How much did the dress cost her if she also paid Rs 125.50 for stitching it to the tailor?
4. Julie bought 2.5 m lace which cost Rs 36.50 per meter. If she handed over a hundred rupee note to the shopkeeper, how much change would she receive?

### Division of decimals by a non-zero whole number

1. Divide  
(a) 0.66 by 0.4      (b) 3.6 by 10      (c) 136.2 by 100      (d) 43.12 by 100  
(e) 946.1 by 1000      (f) 39.36 by 3000      (g) 48.37 by 1000
2. Find the quotient:  
(a)  $49 \div 0.7$       (b)  $144 \div 0.12$       (c)  $48 \div 0.006$       (d)  $48 \div 25$       (e)  $3.25 \div 26$
3. Pinky bought 2.5 m cloth for Rs 41.25. What did she pay for 1m cloth?
4. A dealer sold some bags of rice weighing 387 kg. If the weight of one bag is 25.8 kg. Find the number of bags sold.
5. Rajesh bought 14.5 kg potatoes and paid Rs 127.60. Kannu bought 8.25 kg potatoes. How much will Kannu pay to the shopkeeper?

### Relationship between measures of length

10 millimeter (mm)	= 1 centimeter (cm)
10 centimeters	= 1 decimeter (dm)
10 decimeters	= 1 meter (m)
10 meters	= 1 decameter (dam)
10 decameters	= 1 hectometer(hm)
10 hectometers	= 1 kilometer (km)

1. Convert:  
(a) 3km into m      (c) 4.4 hm into m      (e) 6m into cm  
(b) 1.68 into cm      (d) 3.8 cm into mm
2. Convert  
(a) 8600 m into km      (c) 257 cm into m.      (e) 425 cm into hm  
(b) 825 cm into m and cm      (d) 48 dam 5 m into km

# 7<sup>th</sup> – Decimals



## Relationship between measures of mass

10 milligrams (mg)	= 1 centigram (cg)
10 centigrams	= 1 decigram (dg)
10 decigrams	= 1 grams(g)
10 grams	= 1 decagram (dag)
10 decagrams	= 1 hectogram (hg)
10 hectograms	= 1 kilogram (kg)

1. Convert:

- (a) 5 kg 3 dag into g                      (c) 18g 5mg into mg                      (e) 8.9 kg into mg  
(b) 3 hg 8 dag into cg                      (d) 18.75g into mg

2. Convert

- (a) 8535 mg into g                              (c) 4037 g into kg                              (e) 525 cg into hg  
(b) 3184 mg into dag                              (d) 5g 18 dg into hg

## Relationship between measures of capacity

10 milliliters (ml)	= 1 centigram (cg)
10 centigrams	= 1 decigram (dg)
10 decigrams	= 1 gram (g)
10 grams	= 1 decagram (dag)
10 decagrams	= 1 hectogram (hg)
10 hectograms	= 1 kilogram (kg)

1. Convert:

- (a) 8535 mg into g                              (c) 4037 g into kg                              (e) 525 cg into hg  
(b) 3184 mg into dag                              (d) 17819 g into kg and g

## Relationship between measures of capacity

10 milliliters (ml)	= 1 centiliter (cl)
10 centiliters	= 1 deciliter (dl)
10 deciliters	= 1 liter (l)
10 liters	= 1 decaliter (dal)
10 decaliters	= 1 hectoliter (hl)
10 hectoliters	= 1 kiloliter (kl)

1. Convert:

- (a) 4 kl 5 hl to l                              (c) 3 hl 4 dal to l                              (e) 3.8 l to ml  
(b) 8l 5 cl to cl                              (d) 4.3 dl to ml

2. Convert:

- a) 8535 ml into l                              (c) 425 l into kl                              (e) 12.8 l into hl  
b) 935cl into dl and cl                              (d) 9318 l into kl and l

