

**Board – CBSE****Class – 6TH****Topic – DECIMALS**

1. Write the following decimals in the place value table:

(i) 52.5      (ii) 12.57      (iii) 15.05      (iv) 74.059      (v) 0.503

Decimal	Thousand	Hundred	Tens	One	Tenth	Hundredth	thousandths
s	s	s		s	s	s	
52.5			5	2	5		
12.57			1	2	5	7	
15.05			1	5	0	5	
74.059			7	4	0	5	9
0.503				0	5	0	3

2. Write each of the following decimals in words:

(i) 175.04                      (ii) 0.21

Sol: (i) 175.04 can be written as one hundred seventy-five and four hundredths.

(ii) 0.21 can be written as zero and twenty-one hundredths.

3. Write each of the following as decimals:

(i)  $22/10$                       (ii)  $3/2$

Sol: (i)  $22/10$

Here the denominator is ten,

Hence, the decimal is 2.2

(ii)  $3/2$

Multiplying the fraction by 5

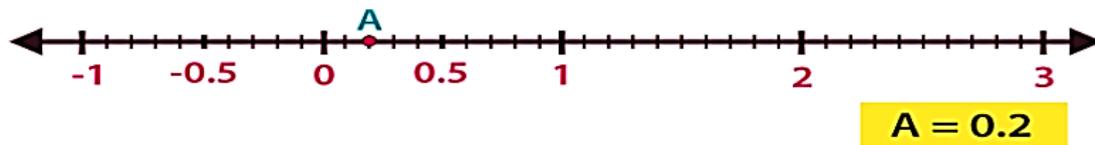
We get

$$(3/2) \times (5/5) = 15/10 = 1.5$$

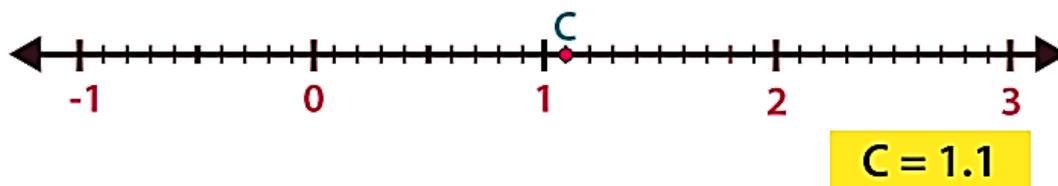
4. Represent the following decimal numbers on the number line:

(i) 0.2                      (ii) 1.1

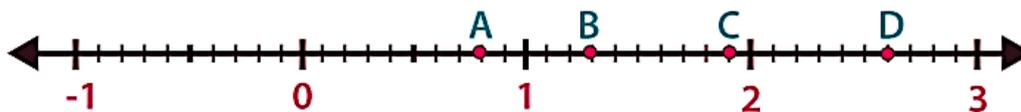
Sol: (i) 0.2 can be represented on the number line as given below:



(ii) 1.1 can be represented on the number line as given below:



5. Write the decimal number represented by the points on the given number line: A, B, C, D.



Sol:

A – We know that A is at the eighth place between the numbers 0 and 1

Hence, the decimal is 0.8

B – We know that B is at the third place between the numbers 1 and 2

Hence, the decimal is 1.3

C – We know that C is at the second place between the numbers 2 and 3

Hence, the decimal is 2.2

D – We know that D is at the ninth place between the numbers 2 and 3

Hence, the decimal is 2.9

6. Write each of the following as decimals:

(i) Five hundred twenty-five and forty hundredths.

(ii) Twelve and thirty-five thousandths

Sol: (i) Five hundred twenty-five and forty hundredths

It can be written as

$$525 + 40/100 = 525.40$$

(ii) Twelve and thirty-five thousandths

It can be written as

$$12 + 35/1000 = 12.035$$

7. Write each of the following as decimals:

(i)  $12 \frac{1}{4}$

(ii)  $7 \frac{1}{8}$

Sol: (i)  $12 \frac{1}{4}$

It can be written as

$$= 12 + 1/4$$

In order to make denominator 100

Multiply and divide by 25

We get

$$= 12 + [(1/4) \times (25/25)]$$

On further calculation

$$= 12 + 25/100$$

So we get

$$= 12.25$$

(ii)  $7 \frac{1}{8}$

It can be written as

$$= 7 + 1/8$$

In order to make denominator 1000

Multiply and divide by 125

We get

$$= 7 + [(1/8) \times (125/125)]$$

On further calculation

$$= 7 + 125/1000$$

So we get

$$= 7.125$$

8. Write each of the following as decimals:

(i)  $20 + 9 + 40/10 + 1/100$

(ii)  $30 + 4/10 + 8/100 + 3/1000$

Sol: (i)  $20 + 9 + 40/10 + 1/100$

We know that

2 tens, 9 ones, 4 tenths and 1 hundredths

Hence, the decimal is 29.41.

(ii)  $30 + \frac{4}{10} + \frac{8}{100} + \frac{3}{1000}$

We know that

3 tens, 4 tenths, 8 hundredths, and 3 thousandths

Hence, the decimal is 30.483.

9. Express as Rupees (Rs) using decimals:

(i) 15 paise

(ii) 5 paise

Sol: (i) 15 paise

We know that 100 paise = Rs 1

So we get 1 paise = Rs  $\frac{1}{100}$

It can be written as

$$15 \text{ paise} = \frac{15}{100}$$

We get

$$15 \text{ paise} = \text{Rs } 0.15$$

(ii) 5 paise

We know that 100 paise = Rs 1

So we get 1 paise = Rs  $\frac{1}{100}$

It can be written as

$$5 \text{ paise} = \frac{5}{100}$$

We get

$$5 \text{ paise} = \text{Rs } 0.05$$

10. Find the sum in each of the following:

(i) 102.36

7.054

+ 0.8

(ii) 113.285

+ 6.7

+ 9.34

+ 30.08

Sol: (i) We know that

$$102.360 + 7.054 + 0.800 = 110.214$$

(ii) We know that

$$113.285 + 6.700 + 9.340 + 30.080 = 370.421$$

11. Radhika's mother gave her Rs 10.50 and her father gave her Rs 15.80, find the total amount given to Radhika by her parents.

Sol: Amount given by Radhika's mother = Rs 10.50

Amount given by Radhika's father = Rs 15.80

So the total amount given by her parents = Rs 10.50 + Rs 15.80 = Rs 26.30

Hence, the total amount given by her parents is Rs 26.30.

12. Subtract:

(i) 46.23

37.5

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(ii) 45.03

27.8

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Sol: (i) We know that

$$46.23 - 37.5 = 8.73$$

(ii) We know that

$$45.03 - 27.8 = 17.23$$

13. Waheeda's school is at a distance of 5 km 350 m from her house. She travels 1 km 70 m on foot and the rest she travels by bus. How much distance does she travel by bus?

Sol: Distance of school from house = 5 km 350 m = 5.350 km

Distance travelled on foot = 1 km 70 m = 1.070 km

Consider x km as the distance traveled by bus

It can be written as,

$$1.070 + x = 5.350$$

On further calculation,

$$x = 5.350 - 1.070$$

So we get,

$$x = 4.280 \text{ km}$$

Hence, the distance travelled by bus is 4.280 km.