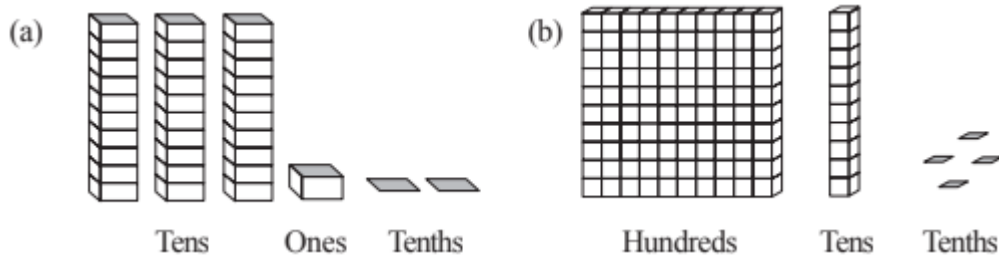# Chapter 8:

Decimals

SOLUTIONS:

Exercise 8.1

1. Write the following numbers in the given table.

Hundreds (100)	Tens (10)	Ones (1)	Tenths $(\frac{1}{10})$

Solutions:

	Hundreds (100)	Tens (10)	Ones (1)	Tenths $(\frac{1}{10})$
(a)	0	3	1	2
(b)	1	1	0	4

2. Write the following decimals in the place value table.

(a)   19.4

(b)   0.3

(c)   10.6

(d)   205.9

Solutions:

	Hundreds (100)	Tens (10)	Ones (1)	Tenths (1/10)
(a)	0	1	9	4
(b)	0	0	0	3
(c)	0	1	0	6
(d)	2	0	5	9

3.Write each of the following as decimals:

a) **Seven-tenths**
b) **Two tens and nine-tenths**
c) **Fourteen point six**
d) **One hundred and two ones**
e) **Six hundred point eight**

Solutions:

a) Seven-tenths = 7 / 10 = 0.7
b) Two tens and nine-tenths = 2 x 10 + 9 x 1 / 10 = 20 + 9 / 10 = 20.9
c) Fourteen point six = 14.6
d) One hundred and two ones = 100 + 0 + 2 + 0 / 10 = 102.0
e) Six hundred point eight = 600.8

4. Write each of the following as decimals:

a) **5 / 10**
b) **3 + 7 / 10**
c) **200 + 60 + 5 + 1 / 10**
d) **70 + 8 / 10**
e) **88 / 10**
f) $4\frac{2}{10}$
g) **3 / 2**
h) **2 / 5**
i) **12 / 5**
j) $3\frac{3}{5}$
k) $4\frac{1}{2}$

Solutions:

    a) **5 / 10 = 0.5**

    b) **3 + 7 / 10 = 3 + 0.7 = 3.7**

    c) **200 + 60 + 5 + 1 / 10 = 200 + 60 + 5 + 0.1 = 265.1**

    d) **70 + 8 / 10 = 70 + 0.8 = 70.8**

    e) **88 / 10 = 8.8**

    f) $4\frac{2}{10}$

        = (4 x 10 +2) / 10

        = 42 / 10

        = 4.2

    g) **3 / 2**   **= (2 + 1) / 2**

               = 2 / 2 + 1 / 2

               = 1 + 0.5

               = 1.5

    h) **2 / 5**   **= 0.4**

    i) **12 / 5**   **= (10 + 2) / 5**

               = 10 / 5 + 2 / 5

               = 2 + 0.4

               = 2.4

    j) $3\frac{3}{5}$

        = (5 x 3 + 3) / 5

        = (15 + 3) / 5

        = 18 / 5

        = 3.6

    k) $4\frac{1}{2}$

        = (4 x 2 + 1) / 2

        = (8 + 1) / 2

        = 9 / 2

        = 4.5

5. Write the following decimals as fractions. Reduce the fraction to lowest form.

    a) **0.6**
    b) **2.5**
    c) **1.0**
    d) **3.8**
    e) **13.7**
    f) **21.2**
    g) **6.4**

Solutions:

    a) **0.6 = 6 / 10 = (6 / 2) / (10 / 2) = 3 / 2**
    b) **2.5 = 25 / 10 = (25 / 5) / (10 / 5) = 5 / 2**
    c) = 10 / 10 = (10 / 10) / (10 / 10) = 1 / 1 = 1
    d) 3.8 = 38 / 10 = (38 / 2) / (10 / 2) = 19 / 5
    e) 13.7 = 137 / 10
    f) 21.2 = 212 / 10 = (212 / 2) / (10 / 2) = 106/5
    g) 6.4 = 64 / 10 = (64 / 2) / (10 / 2) = 32 / 5

6. Express the following as cm using decimals.

    a) **2 mm**
    b) **30 mm**
    c) **116 mm**
    d) **4 cm 2 mm**
    e) **162 mm**
    f) **83 mm**

Solutions:

    a) **2 mm**

1 mm = 1 / 10 cm

      = 2 / 10 cm

      = 0.2 cm

    b) **30 mm**

1 mm = 1 / 10 cm

      = 30 / 10 cm

      = 3.0 cm

      = 3 cm

c) **116 mm**

1 mm = 1 / 10 cm

    = 116 / 10 cm

    = 11.6 cm

d) **4 cm 2 mm**

1 mm = 1 / 10 cm

4 cm + 2 / 10 cm

= 4 + 0.2 cm

= 4.2 cm

e) **162 mm**

1 mm = 1 / 10 cm

    = 162 / 10 cm

    = 16.2 cm

f) **83 mm**

1 mm = 1 / 10 cm

    = 83 / 10 cm

    = 8.3 cm

7. Between which two whole numbers on the number line are the given numbers lie?

Which of these whole numbers is nearer the number?
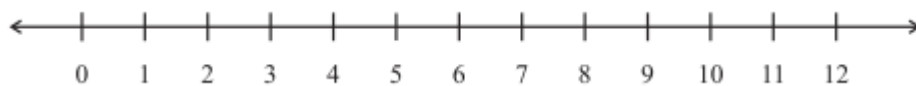
(a) 0.8   (b) 5.1   (c) 2.6   (d) 6.4   (e) 9.1   (f) 4.9

Solutions:

a) 0.8

lies between 0 and 1, 1 is nearer to 0.8

b) 5.1

5.1 lies between 5 and 6, 5 is nearer to 5.1

c) 2.6

2. 6 lies between 2 and 3, 3 is nearer to 2.6

d) 6.4

6.4 lies between 6 and 7, 6 is nearer to 6.4

e) 9.1

 9.1 lies between 9 and 10, 9 is nearer to 9.1

f) 4.9
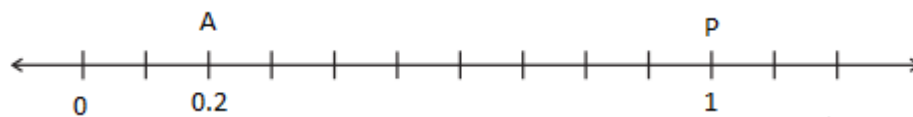
4.9 lies between 4 and 5, 5 is nearer to 4.9

8. Show the following numbers on the number line.

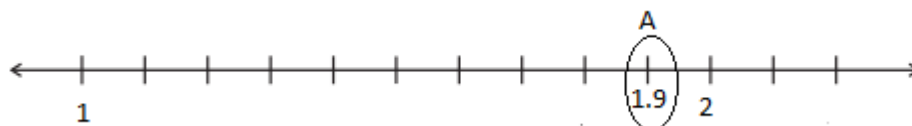**(a) 0.2   (b) 1.9   (c) 1.1   (d) 2.5**

Solutions:

a) **0.2**

0.2 lies between 0 and 1. We divide unit length between 0 and 1 into 10 equal parts and take 2 parts as shown.
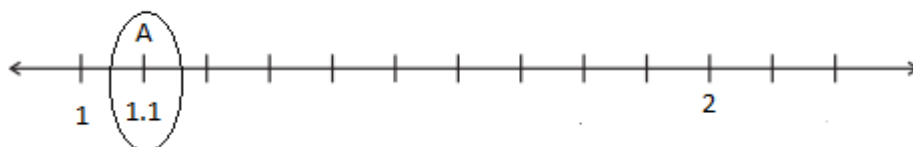

Point A represents 0.2

b) 1.9

1.9 lies between 1 and 2. We divide unit length between 1 and 2 into 10 equal parts and take 9 parts as shown.
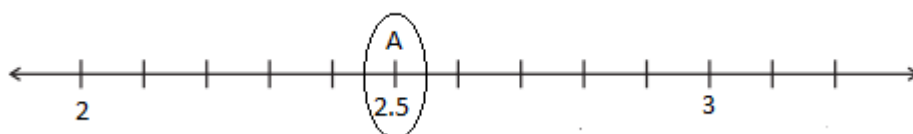

Point A represents 1.9

c) **1.1**

lies between 1 and 2. We divide unit length between 1 and 2 into 10 equal parts and take 1 part as shown.

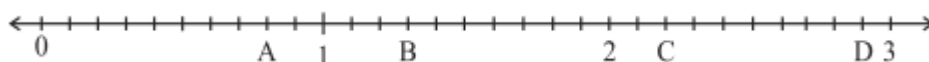**Point A represents 1.1**

d) **2.5**

2.5 lies between 2 and 3. We divide unit length between 2 and 3 into 10 equal parts and take 5 parts as shown.

Point A represents 2.5

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

Solution:

a) **Point A:** Point A lies between 0 and 1, the unit length between 0 and 1 stands divide in 10 equal parts. Also A is at 8th point. A represent 0.8.
b) **Point B:** Point B lies between 1 and 2, the unit length between 1 and 2 stands divide into 10 equal parts. Also B lies 3 points ahead of 1. B represents 1.3.
c) **Point C and D:** Points C and D lie between 2 and 3, the unit length between 2 and 3 stands divide between 2 and 3 into 10 equal parts. Also C and D respectively lies 2 and 9 points ahead of 2. C represents 2.2 and D represents 2.9.

9. (a) The length of Ramesh's notebook is 9 cm 5 mm. What will be its length in cm?

(b) The length of a young gram plant is 65 mm. Express its length in cm.

Solutions:

a) **Length of Ramesh's notebook = 9 cm 5mm**

= 9 cm + 5 / 10 cm

= 9 cm + 0.5 cm
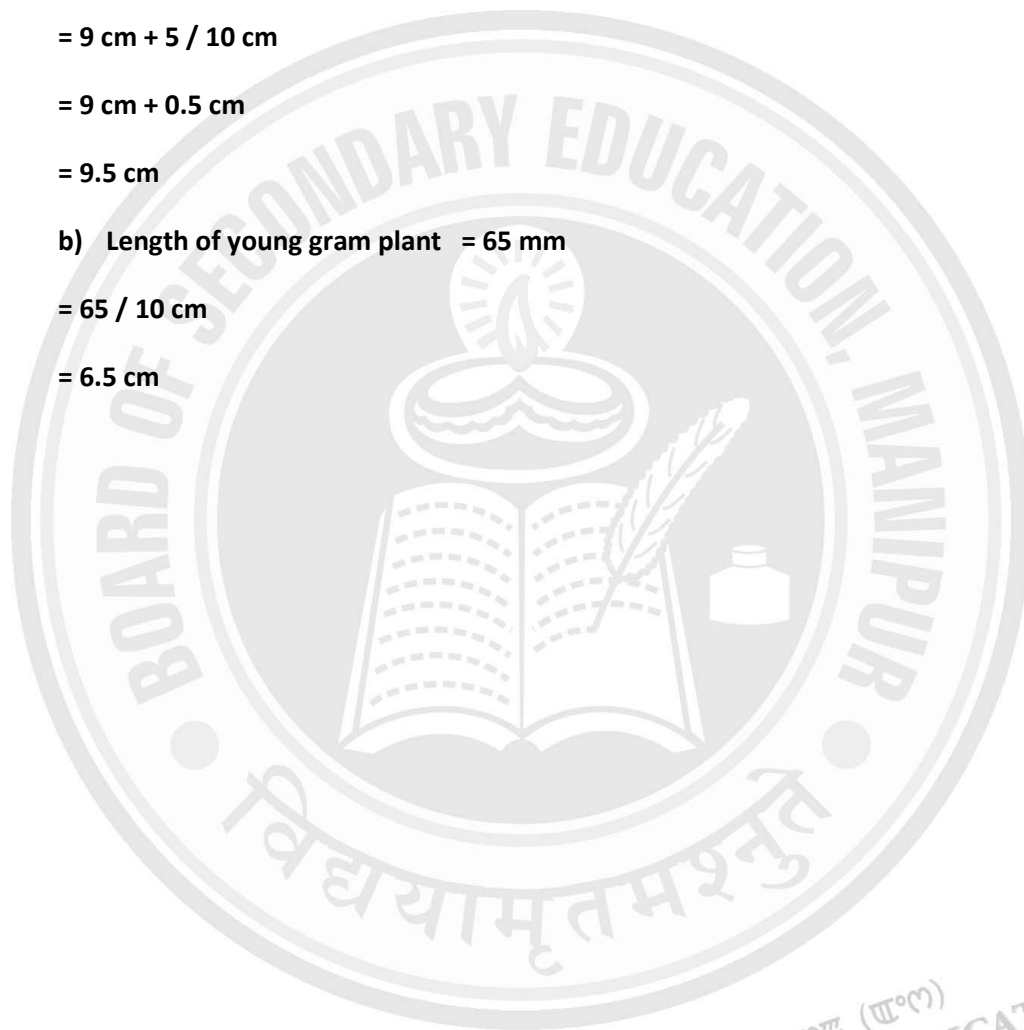
= 9.5 cm

b) **Length of young gram plant = 65 mm**

= 65 / 10 cm

= 6.5 cm
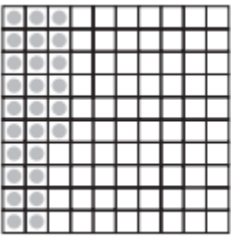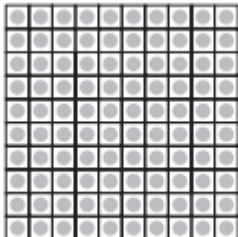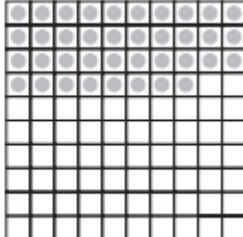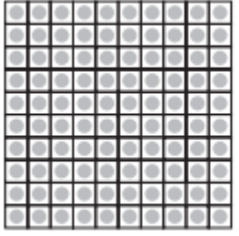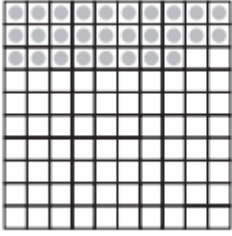
Exercise 8.2

1. Complete the table with the help of these boxes and use decimals to write the number.

	Ones	Tenths	Hundredths	Number
(a)	0	2	6	0.26
(b)	1	3	8	1.38
(c)	1	2	8	1.28

Solutions:

a) 26 small parts out of 100 are shaded. The decimal 0.26 is represented.

b) 100 parts + 38 parts are shaded $100 / 100 + 38 / 100 = 1.38$ is represented by the shaded portion.

c) 100 parts + 28 part are shaded

$100 / 100 + 28 / 100 = 1 + 28 / 100 = 1.28$

1.28 is represented by the shaded portion. The table is complied.

2 . Write the numbers given in the following place value table in decimal form.

	Hundreds 100	Tens 10	Ones 1	Tenths $\frac{1}{10}$	Hundredths $(\frac{1}{100})$	Thousandths $\frac{1}{1000}$
(a)	0	0	3	2	5	0
(b)	1	0	2	6	3	0
(c)	0	3	0	0	2	5
(d)	2	1	1	9	0	2
(e)	0	1	2	2	4	1

Solutions:

a) The number is

= (0 x 100) + (0 x 10) + (3 x 1) + (2 x 1 / 10) + (5 + 1 / 100) + (0 X 1 / 1000)

= 0+ 0 + 3 + 2 / 10 + 5 / 100 + 0 / 1000

= 3. 250

b) **The number is**

= (1 x 100) + (0 x 10) + (2 x1) + (6 x 1 / 10) + (3 x 1 / 100) + (0 x 1 /1000)

=100 + 0 + 2 + 6 / 10 + 3 / 100 + 0 / 1000

= 100 + 2 + 6 / 10 + 3 / 100 + 0 / 1000

= 102. 630

c) **The number is**

= (0 x 100) + (3 x 10) + (0 x 1) + (0 x 1 / 10) + (2 x 1 / 100) + (5 x 1 / 1000)

= 0 + 30 + 0 + 0 / 10 + 2 / 100 + 5 / 1000

= 30.025

d) **The number is**

= (2 x100) + (1 x 10) + (1 x 1) + (9 x 1 / 10) + (0 x 1 / 100) + (2 x 1 / 1000)

= 200 + 10 + 1 + 9 / 10 + 0 / 100 + 2 / 1000

=211.902

e) **The number is**

= (0 x 100) + (1 x 10) + (2 x 1) + (2 x 1 /10) + (4 x 1 / 100) + (1 x 1 /1000)

= 0 + 10 + 2 + 2 / 10 + 4 / 100 + 1 / 1000

=12.241

3.Write the following decimals in the place value table.

(a) 0.29 (b) 2.08 (c) 19.60 (d) 148.32 (e) 200.812

Solutions:

	Hundreds (100)	Tens (10)	Ones (1)	Tenths (1 / 10)	Hundredths (1/100)	Thousandths (1 /1000)
A	0	0	0	2	9	0
B	0	0	2	0	8	0
C	0	1	9	6	0	0
D	1	4	8	3	2	0
E	2	0	0	8	1	2

4. Write each of the following as decimals.

(a) $20 + 9 + \frac{4}{10} + \frac{1}{100}$

(b) $137 + \frac{5}{100}$

(c) $\frac{7}{10} + \frac{6}{100} + \frac{4}{1000}$

(d) $23 + \frac{2}{10} + \frac{6}{1000}$

(e) $700 + 20 + 5 + \frac{9}{100}$

Solutions:

a) **20 + 9 + 4 / 10 + 1 / 100**

= 29 + 0.4 + 0.01

= 29.41

b) **137 + 5 / 100**

= 137 + 0.05

=137.05

c) $7/10 + 6/100 + 4/1000$

$= 0.7 + 0.06 + 0.004$

$= 0.764$

d) $23 + 2/10 + 6/1000$

$= 23 + 0.2 + 0.006$

$= 23.206$

e) $700 + 20 + 5 + 9/100$

$= 700 + 20 + 5 + 0.09$

$= 725.09$

5. Write each of the following decimals in words.

(a) 0.03

(b) 1.20

(c) 108.56

(d) 10. 07

(e) 0.032

(f) 5.008

Solutions:

a) **0.03 = Zero point zero three**
b) **1.20 = One point two zero**
c) **108.56 = One hundred eight point five six**
d) **10.07= Ten point zero seven**
e) **0.032 = Zero point zero three two**
f) 5.008 = Five point zero zero eight

6. Between which two numbers in tenths place on the number line does each of the given number lie?

(a) 0.06 (b) 0.45 (c) 0.19 (d) 0.66 (e) 0.92 (f) 0.57

Solutions:

a) **0.06 lies between the numbers - 0.1 and 0.1**
b) **0.45 lies between the numbers 0.3 and 0.5**
c) **0.19 lies between the numbers 0.0 and 0.2**
d) **0.66 lies between the numbers 0.5 and 0.7**
e) **0.92 lies between the numbers 0.8 and 1.0**
f) **0.57 lies between the numbers 0.4 and 0.6**

7. Write as fractions in lowest terms.

(a) 0.60 (b) 0.05 (c) 0.75 (d) 0.18 (e) 0.25 (f) 0.125 (g) 0.066

Solutions:

a) **0.60**

$$= \frac{60}{100}$$

$$= \frac{6}{10}$$

$$= \frac{3}{5}$$

b) **0.05**

= 5 / 100

= 1 / 20

c) **0.75**

= 75 / 100

= 15 / 20

= 3 / 4

d) **0.18**

= 18 / 100

=9 / 50

e) **0.25**

= 25 / 100

= 5 /20

=1 / 4

f) **0.125**

= 125 /1000

= (125 /5) / (1000 / 5)

= (25 /5) / (200 /5)

= (5 / 5) / (40 / 5)

=1 / 8

g) **0.066**

= 66 / 1000

= (66 / 2) / (1000 / 2)

= 33 / 500

Exercise 8.3

1. Which is greater?

(a) 0.3 or 0.4 (b) 0.07 or 0.02 (c) 3 or 0.8 (d) 0.5 or 0.05

(e) 1.23 or 1.2 (f) 0.099 or 0.19 (g) 1.5 or 1.50 (h) 1.431 or 1.490

(i) 3.3 or 3.300 (j) 5.64 or 5.603

Solutions:

   a) **0.3 or 0.4**

0.3 = 3 / 10

0.4 = 4 / 10

3 / 10 < 4 / 10

∴ **0.3 < 0.4**

   b) **0.07 or 0.02**

0.07 = 7 / 100

0.02 = 2 / 100

7 /100 > 2 / 100

∴ 0.07 > 0.02

   c) 3 or 0.8

3 = 3.0

0.8 = 0.8

Whole part of 3 = 3

Whole part of 0.8 = 0

3 > 0

∴ 3 > 0.8

   d) 0.5 or 0.05

0.5 = 5 /10

0.05 = 5 / 100

Tenth part of 0.5 = 5

Tenth part of 0.05 = 0

5 > 0

∴ 0.5 > 0.05

e) 1.23 or 1.2

= 1 x 1 + 2 / 10 + 3 / 100

= 1 x 1 + 2 / 10

Whole part = 1 for 1.23 and 1.2

Tenth part = 2 for 1.23 and 1.2

Hundredth part = 3 and 0 for 1.23 and 1.2

3 > 0 i.e. 3 / 100 > 0 / 100

   ∴ 1.23 > 1.2

f) 0.099 or 0.19

0.099 = 0 x 1 + 0 / 10 + 9 / 100 + 9 / 1000

0.19 = 0 x 1 + 1 / 10 + 9 / 100

Whole part = 0 for 0.099 and 0.19

Tenth part = 0 and 1 for 0.099 and 0.19

0 < 1 i.e. 0 / 10 < 1 / 10

∴ **0.099 < 0.19**

g) 1.5 or 1.50

1.5 = 1 x 1 + 5 / 10

1.50 = 1 x 1 + 5 / 10 + 0 / 100

Whole part = 1 for 1.5 and 1.50

Tenths part = 5 for 1.5 and 1.50

Hundredths = 0 for 1.5 and 1.50

   ∴ 1.5 = 1.50

h)   1.431 or 1.490

1.431 = 1 x 1 + 4 / 10 + 3 /100 + 1 /1000

1.490 = 1 x 1 + 4 / 10 + 9 / 100 + 0 / 1000

Whole part = 1 for 1.431 and 1.490

Tenths part = 4 for 1.431 and 1.490

Hundredth part = 3 and 9 for 1.431 and 1.490

3< 9   i.e. 3 /100 < 9 / 100

∴   1.431 < 1.490

i)   3.3 or 3.300

3.3 = 3 x 1 + 3 / 10

3.300 = 3 x 1 + 3 / 10 + 0 / 100 + 0 / 1000

Whole part = 3 for 3.3 and 3.300

Tenth part = 3 for 3.3 and 3.00

Hundredth part = 0 for 3.3 and 3.300

∴ 3.3 = 3.300

j)   5.64 or 5.603

5.64m = 5 x 1 + 6 / 10 + 4 / 100

5.603 = 5 x 1 + 6 / 10 + 0 / 100 + 3 / 1000

Whole part = 5 for 5.64 and 5.603

Tenth part = 6 for 5.64 and 5.603

Hundredth part = 4 and 0 for 5.64 and 5.603

4 > 0 i.e. 4 / 100 > 0 / 100

∴ **5.64 > 5.603**

2. Make five more examples and find the greater number from them.

Solutions:

Five more examples are

    a) **0.5 or 0.9**

0.5 = 5 / 10

0.9 = 9 / 10

Whole part = 0 of 0.5 and 0.9

Tenth part = 5 and 9 for 0.5 and 0.9.

    ∴ 5 < 9

b) **2.0 or 0.8**

2.0 = 2 x 1 + 0 / 10

0.8 = 0 x 1 + 8 / 10

Whole part = 2 and 0 for 2.0 and 0.8

    ∴ 2.0 > 0.8

c)   0.042 or 0.33

0.042 = 0 x 1 + 0 / 10 + 4 / 100 + 2 / 1000

0.33 = 0 x 1 + 3 / 10 + 3 / 100

Whole part = 0 for 0.042 and 0.33

Tenth part = 0 and 3 for 0.042 and 0.33

0 < 3 i.e. 0 / 10 < 3 / 10

    ∴ 0.042 < 0.33

d) 0.075 or 0.15

0.075 = 0 x 1 + 0 / 10 + 7 / 100 + 5 / 1000

0.15 = 0 x 1 + 1 / 10 + 5 / 100

Whole part = 0 for 0.075 and 0.15

Tenth part = 0 and 1 for 0.075 and 0.15

0 < 1 i.e. 0 / 10 < 1/ 10

∴ 0.075 < 0.15

e) 3.012 or 2.99

3.012 = 3 x 1 + 0 / 10 + 1 /100 + 2 / 1000

2.99 = 2 x 1 + 9 / 10 + 9 / 100

Whole part = 3 and 2 for 3.012 and 2.99

3 > 2

∴ 3.012 > 2.99

Exercise 8.4

1. Express as rupees using decimals.

(a) 5 paise (b) 75 paise (c) 20 paise (d) 50 rupees 90 paise

(e) 725 paise

Solutions:

a) **5 paise**

1 paise = Rs 1 / 100

 =Rs 5 / 100

 = Re 0.05

b) **75 paise**

1 paise = Rs 1 / 100

 = Rs 75 / 100

 = Re 0.75

c) **20 paise**

1 paise = Rs 1 / 100

 = Rs 20 / 100

 = Re 0.20

d) **50 rupees 90 paise**

= Rs 50 + Rs 90 / 100

= Rs 50 + Rs 0.90

= Rs 50.90

e) **725 paise**

1 paise = Rs 1 / 100

 = Rs 725 / 100

 = Rs 7.25

2. Express as metres using decimals.

(a) 15 cm(b) 6 cm(c) 2 m 45 cm(d) 9 m 7 cm(e) 419 cm

Solutions:

a) **15 cm**

1 cm = 1 / 100 m

   = 15 / 100 m

   = 0.15 m

b) **6 cm**

1 cm = 1 / 100 m

   = 6 / 100 m

   = 0.06 m

c) **2 m 45 cm**

1 cm = 1 / 100 m

   = 2 m + 45 / 100 m

   = 2 + 0.45 m

   = 2. 45 m

d) **9 m 7 cm**

1 cm = 1 / 100 m

   = 9 m + 7 / 100 m

   = 9 + 0.07 m

   = 9.07 m

e) **419 cm**

1 cm = 1 / 100 m

   = 419 / 100 m

   = 4.19 m

3. Express as cm using decimals

(a) 5 mm (b) 60 mm (c) 164 mm (d) 9 cm 8 mm (e) 93 mm

Solutions:

We know that 1 mm = 1 / 10 cm

   a)   5 mm = 5 / 10 cm

   = 0.5 cm

   b)   60 mm = 60 / 10 cm

   = 6.0 cm

   c)   164 mm = 164 / 10 cm

   = 16.4 cm

   d)   9 cm 8 mm = [(9 + 8 / 10)] cm

   = 9.8 cm

   e)   93 mm = 93 / 10 cm

   = 9.3 cm

4. Express as km using decimals.

(a) 8 m (b) 88 m (c) 8888 m (d) 70 km 5 m

Solutions:

We know that 1 m = 1 / 1000 km

(a) 8 m = 8 / 1000 km

= 0.008 km

(b) 88 m = 88 / 1000 km

= 0.088 km

(c) 8888 m = 8888 / 1000 km

= 8.888 km

(d) 70 km 5 m = [(70 + 5 / 1000)] km

= 70.005 km

4. Express as kg using decimals.

(a) 2 g (b) 100 g (c) 3750 g (d) 5 kg 8 g (e) 26 kg 50 g

Solutions:

We know that 1 g = 1 / 1000 kg

    a)   2 g = 2 / 1000 kg

        = 0.002 kg

    b)   100 g = 100 / 1000 kg

        = 0.1 kg

    c)   3750 g = 3750 / 1000 kg

        = 3.750 kg

    d)   5 kg 8 g = [(5 + 8 / 1000)] kg

        = 5.008 kg

    e)   26 kg 50 g = [(26 + 50 / 1000)] kg

        = 26.050 kg

Exercise 8.5

1.Find the sum in each of the following:

   a) **0.007 + 8.5 + 30.08**
   b) **15 + 0.632 + 13.8**
   c) **27.076 + 0.55 + 0.004**
   d) **25.65 + 9.005 + 3.7**
   e) **0.75 + 10.425 + 2**
   f) **280.69 + 25.2 + 38**

Solutions:

   a) **0.007 + 8.5 + 30.08**

$$
\begin{array}{r}
00.007 \\
08.500 \\
+30.080 \\
\hline
38.587 \\
\hline
\end{array}
$$

   b) **15 + 0.632 + 13.8**

$$
\begin{array}{r}
15.000 \\
00.632 \\
+13.800 \\
\hline
29.432 \\
\hline
\end{array}
$$

   c) **27.076 + 0.55 + 0.004**

$$
\begin{array}{r}
27.076 \\
00.550 \\
+\;00.004 \\
\hline
27.630 \\
\hline
\end{array}
$$

d) 25.65 + 9.005 + 3.7

   25.650

   09.005

+ 03.700

   38.355

e) 0.75 + 10.425 + 2

   00.750

   10.425

+ 02.000

   13.175

f) 280.69 + 25.2 + 38

   280.69

   025.20

+ 038.00

   343.89

2. Rashid spent Rs 35.75 for Maths book and Rs 32.60 for Science book. Find the total amount spent by Rashid.

Solution:

Cost of Maths book = Rs 35.75

Cost of science book = Rs 32.60

Total cost of both = Rs 35.75 + Rs 32.60 = Rs 68.35

∴ **Amount spent by Rashid = Rs 68.35**

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

Solution:

Radhika's mother gave her = Rs 10.50

Radhika's father gave her = Rs 15.80

Total money = Rs 10.50 + Rs 15.80

= Rs 26.30

∴ Total amount given to Radhika = Rs 26.30

4. Nasreen bought 3 m 20 cm cloth for her shirt and 2 m 5 cm cloth for her trouser. Find the total length of cloth bought by her.

Solution:

Nasreen bought cloth for her shirt = 3 m 20 cm

Nasreen bought cloth for her trouser = 2 m 5 cm

Total cloth = 3 m 20 cm + 2 m 5 cm = 5 m 25 cm

∴ Total length of cloth bought by Nasreen is 5.25 m

5. Naresh walked 2 km 35 m in the morning and 1 km 7 m in the evening. How much distance did he walk in all?

Solution:

Distance travelled in morning walk by Naresh

= 2 km 35m

$$= 2 \text{ km} + 35 / 1000 \text{ km}$$

$$= 2\text{km} + 0.035 \text{ km}$$

$$= 2.035 \text{ km}$$

Distance travelled in the evening by naresh

$$= 1 \text{ km } 7 \text{ m}$$

$$= 1 \text{ km} + 7 / 1000 \text{ km}$$

$$= 1 \text{ km} + 0.007 \text{ km}$$

$$= 1.007 \text{ km}$$

∴Total distance travelled by Naresh = 2.035 km + 1.007 km

= 3.042 km

6. Sunita travelled 15 km 268 m by bus, 7 km 7 m by car and 500 m on foot in order to reach her school. How far is her school from her residence?

Solution:

Distance covered by bus = 15 km 268 m

= 15 km + 268 /1000 km

= 15 km + 0.268 km

= 15.268 km

Distance covered by car = 7 km 7 m

= 7 km + 7 / 1000 km

= 7 km + 0.007 km

= 7.007 km

Distance covered by foot = 500 m = 500 / 1000 km = 0.500 km

∴ **Total distance covered = 15.268 km + 7.007 km + 0.500 km = 22.775 km**

7. Ravi purchased 5 kg 400 g rice, 2 kg 20 g sugar and 10 kg 850 g flour. Find the total weight of his purchases.

Solution:

Weight of rice purchased by Ravi = 5 kg 400 g

= 5 kg + 400 / 1000 kg

= 5 kg + 0.400 kg

= 5.400 kg

Weight of sugar purchased   = 2 kg 20 g

= 2 kg + 20 / 1000 kg

= 2 kg + 0.020 kg

= 2.020 kg

Weight of floor purchased = 10 kg 850 g

= 10 kg + 850 / 1000 kg

= 10 kg + 0.850 kg

= 10.850 kg

∴Total weight of his purchased = 5.400 kg + 2.020 kg + 10. 850 kg

= 18.270 kg
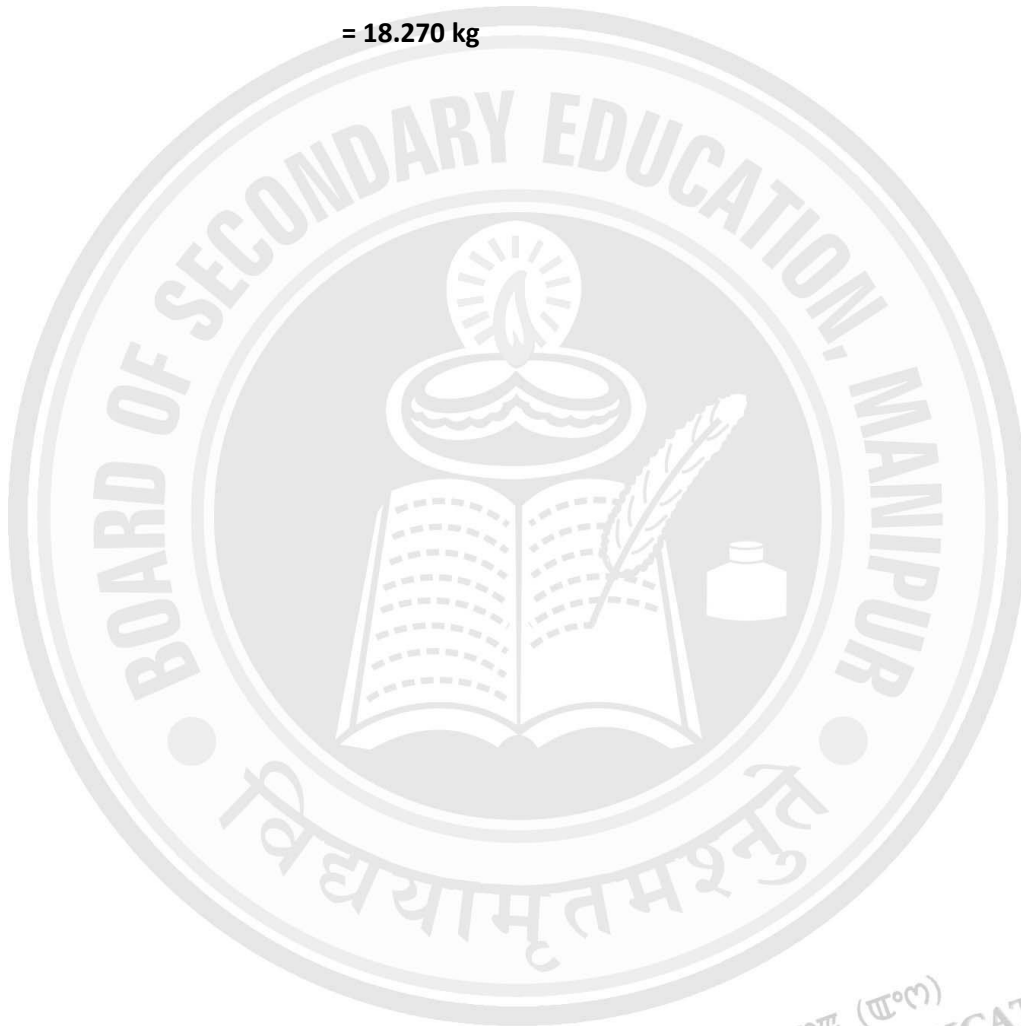
Exercise 8.6

1. Subtract:

a) **Rs 18.25 from Rs 20.75**
b) **202.54 m from 250 m**
c) **Rs 5.36 from Rs 8.40**
d) **2.051 km from 5.206 km**
e) **0.314 kg from 2.107 kg**

Solutions:

a) **Rs 18.25 from Rs 20.75**

Rs 20.75 – 18.25

```
    20.75
-   18.25
   _____
 Rs 02.50
```

b) **202.54 m from 250 m**

250 m – 202.54

```
    250.00
-   202.54
   _____
    47.46 m
```

c) **Rs 5.36 from Rs 8.40**

Rs 8.40 – Rs 5.36

```
    8.40
-   5.36
   _____
 Rs 3.04
```

d) **2.051 km from 5.206 km**

5.206 km – 2.051

```
    5.206
-   2.051
   _____
    3.155 km
```

(e) 0.314 kg from 2.107 kg

2.107 kg – 0.314

2.107

- 0.314
  ___

1.793 kg
___

2. Find the value of:

a) **9.756 – 6.28**
b) **21.05 – 15.27**
c) **18.5 – 6.79**
d) **11.6 – 9.847**

Solutions:

a) **9.756 – 6.28**

9.756

– 6.280
  ___

3.476
___

b) **21.05 – 15.27**

21.05

- 15.27
  ___

5.78
___

c) **18.5 – 6.79**

18.50

-   6.79
  ___

11.71
___

d) **11.6 − 9.847**

    11.600

-   **9.847**

     1.753

3.Raju bought a book for Rs 35.65. He gave Rs 50 to the shopkeeper. How much money did he get back from the shopkeeper?

Solution:

Cost of a book = Rs 35.65

Raju gave money to shopkeeper = Rs 50

Money he got back = Rs 50 − Rs 35.65

           = Rs 14.35

4. Rani had Rs 18.50. She bought one ice cream for Rs 11.75. How much money does she have now?

Solution:

Total money Rani had = Rs 18.50

Money spent on ice-cream = Rs 11.75

Money left with Rani = Rs 18.50 − Rs 11.75

           = Rs 6.75

5.Tina had 20 m 5 cm long cloth. She cuts 4 m 50 cm length of cloth from this for making a curtain. How much cloth is left with her?

Solutions:

Total length of cloth = 20 m 5 cm

           = 20 m + 5 /100 m

           = 20 m + 0.05 m

           = 20.05 m

Length of cloth cut for making a curtain = 4 m 50 cm

                   = 4 m + 50 / 100 m

= 4 m + 0.50 m

= 4.50 m

∴ Length of cloth left = 20.05 m − 4.50 m = 15.55 m.

5. Namita travels 20 km 50 m every day. Out of this she travels 10 km 200 m by bus and the rest by auto. How much distance does she travel by auto?

Solution:

Distance travelled by Namita in a day = 20 km 50 m = 20.050 km

Distance travelled by bus = 10 km 200 m = 10.200 km

Distance travelled by auto = (20.050 − 10.200) km

= 9.850km

= 9 km 850 m

6. Aakash bought vegetables weighing 10 kg. Out of this, 3 kg 500 g is onions, 2 kg 75 g is tomatoes and the rest is potatoes. What is the weight of the potatoes?

Solution:

Total weight of vegetable bought = 10 kg

Weight of onion = 3 kg 500 g = 3 kg + 500 /1000 kg

= 3 kg + 0.500 kg

= 3.500 kg

Weight of tomatoes = 2 kg 75 g

= 2 kg + 0.075 kg

= 2.075 kg

Total weight of the onion and tomatoes = 3.500 kg + 2.075 kg = 5.575 kg

∴ Weight of potatoes = 10 kg − 5.575 kg = 4.425 kg