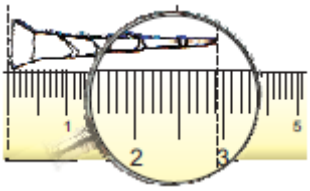
Chapter 10

Tenths and Hundredths

1Marks Questions

1. Length of the nail – 2 cm and __ mm or 2 __ cm



Answer-

Length of the nail – 2 cm and 9 mm or 2.9 cm.

2.

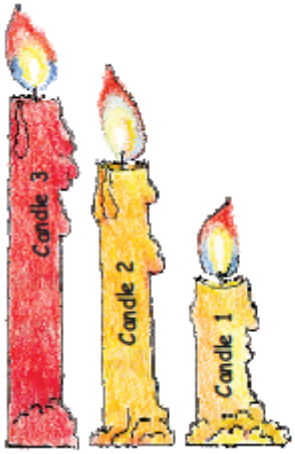
The length of this lady finger (bhindi) is ____ cm and ____ mm.

We can also write it as ____ cm?

Answer-

The length of this lady finger (bhindi) is 8 cm and 3 mm. We can also write it as 8.3 cm.

3. Using the scale on this page, find the difference in length between candle 1 and candle 3.



Length of	*Length in cm and mm*	*Length in cm*
Candle 1		
Flame 1		
Candle 2		
Flame 2		
Candle 3		
Flame 3		

Answer-

Length of	*Length in cm and mm*	*Length in cm*
Candle 1	2 cm 9 mm	2.9 cm
Flame 1	1 cm 3 mm	1.3 cm
Candle 2	4 cm 9 mm	4.9 cm
Flame 2	1 cm 9 mm	1.9 cm
Candle 3	6 cm	6 cm
Flame 3	1 cm 9 mm	1.9 cm

4.Guess and Colour

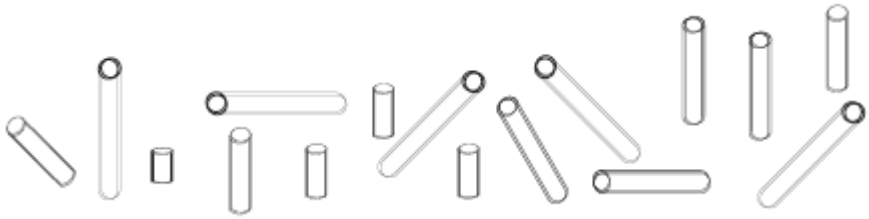
First, colour the rods as shown, without measuring! Then check.

Rods of length less than 1 cm Red.

Rods of length between 1 cm and 2 cm Blue.

Rods of length between 2 cm and 3 cm Green.

Rods of length between 3 cm and 4 cm Orange.



Answer-

This should be done by the students.

5.Guess, Draw and Measure

1. Guess the lengths to draw these things. Ask your friend to draw the same. After you make the drawing, use a scale to measure the length. Whose drawing showed a better guess?

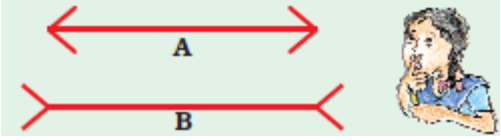
Guess its length and draw	*Measure of your drawing*	*Measure of your friend's drawing*
An ant of length less than 1 cm		
Pencil of length about 7 cm		
A glass 11 cm high with water up to 5 cm		
A bangle of perimeter 20 cm		
A curly hair of length 16 cm		

Answer-

Guess its length and draw	*Measure of your drawing*	*Measure of your friend's drawing*
An ant of length less than 1 cm	0.8 cm	1.4 cm
Pencil of length about 7 cm	6.4 cm	7.2 cm
A glass 11 cm high with water up to 5 cm	10.5 cm & 4.6 cm	8 cm and 4.5 cm
A bangle of perimeter 20 cm	18.9 cm	20.2 cm
A curly hair of length 16 cm	15 cm	16.6 cm

6.Our Eyes Get Confused?

1. Which line is longer? A or B? Measure each line and write how long it is in centimetres. How good is your guess?



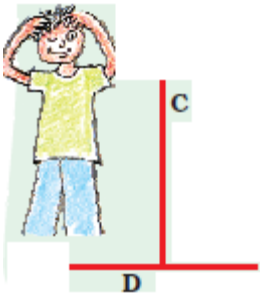
Answer-

Line B is longer than line A.

Line A = 4.6 cm

Line B = 4.6 cm

2. Which line is longer? C or D? Measure each line. How good is your guess?



Answer-

Line C is longer than line D.

By measuring both, the lines are equal.

C = D = 3.2 cm

7.Whose Tail is the Longest?

1. Guess whose tail is the longest. Now, measure the tails. How good is your guess?

Answer-

From the figure, we know that the monkey's tail is the longest. The measurement of tails is given below.

Animal	Rat	Lizard	Puppy	Cat	Pig	Monkey
Length of tail	1.4 cm	1.8 cm	0.9 cm	1.3 cm	1.1 cm	2.3 cm

8Marks Questions

1. What was the length of the smallest pencil you have used?

Solution:-

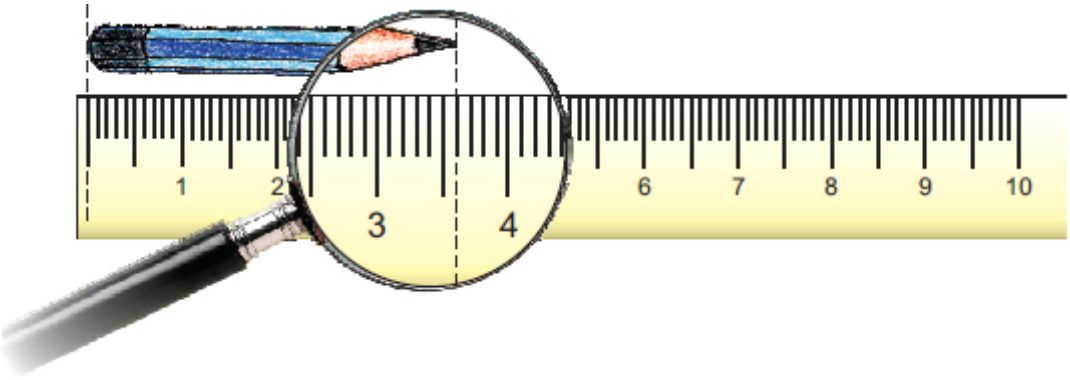
The length of the smallest pencil I have used is 2 cm.

2. How long is this pencil? Guess _____ cm?

Solution:-

I guess the pencil is 3 cm long.

3. Measure it using a scale. How good is your guess?

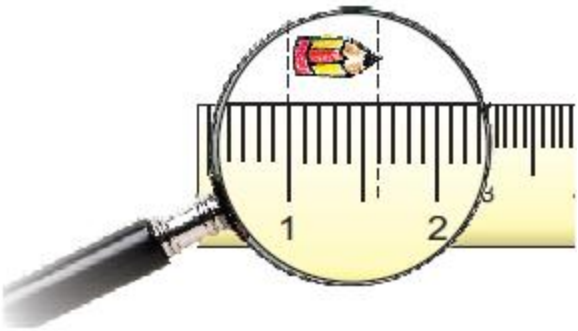


Solution:-

The length of the pencil measured by using the scale is 3 cm and 6 millimetres (mm), so my guess is near to the correct value.

Here, one centimetre has 10 equal parts. So, each part is one-tenth of a centimetre. One-tenth of a centimetre is called one millimetre (mm).

4. What is the length of this pencil? _____ mm. What is its length in centimetres?



Solution:-

The length of the given pencil is 6mm, and its length in centimetres is six-tenth of a centimetre, i.e., 0.6 cm.

Frogs

Have you seen frogs? Where? How many different types of frogs have you seen? Are all the frogs of the same length?

Solution: -

Yes, I have seen frogs in ponds, lakes, etc. I have seen many kinds of frogs.

No, not all the frogs are of the same length.

Here are two interesting examples.

Frogs

Have you seen frogs? Where? How many different types of frogs have you seen? Are all the frogs of the same length? Here are two interesting examples.

Gold Frogs

This kind of frog is among the smallest in the world. Its length is only 0.9 cm !

Guess how many such frogs can sit on your little finger!

Bull Frog

But this is among the biggest frogs. It is as long as 30.5 cm!

6. What does 0.9 cm mean? It is the same as ____ millimetres. We can also say this is nine-tenths of a cm. Right?

Solution:

Here, one centimetre has 10 equal parts. So, each part is one-tenth of a centimetre. One-tenth of a centimetre is called one millimetre (mm).

So, 0.9 cm is the same as 9 millimetres.

Yes, we can say 0.9 cm is nine-tenths of a cm.

7. So 30.5 cm is the same as cm and millimetre?

Solution:

So, 30.5 cm is the same as 30 cm and 5 millimetres.

8. About how many of the big frogs will fit on the 1m scale?

Solution:

As we know, 1m = 100 cm.

Then, the length of the big frog is 30.5 cm.

So, 3 big frogs will fit on the 1 cm scale.

9. If they sit in a straight line about how many of the small frogs will cover 1m?

Solution:

As we know, 1m = 100 cm.

Then, the length of the small frog is 0.9 cm.

= 100/0.9

= 111

If small frogs sit in a straight line, 111 frogs will cover 1m.

10. What is the length of a 100 rupee note? Guess. Now, measure it using a scale.

Answer-

I guess that the length of a 100 rupee note is 16 cm. By measuring it, we find that the length of a 100 rupee note is 15.6 cm.

11. Now, guess the length and width of many other things. Measure and find the difference between your measure and your guess.

Size of	Your guess in cm		Your measure in cm	
	length	width	length	width
100 Rupee note				
10 Rupee note				
20 Rupee note				
5 Rupee note				
Post card				
Math-Magic book				

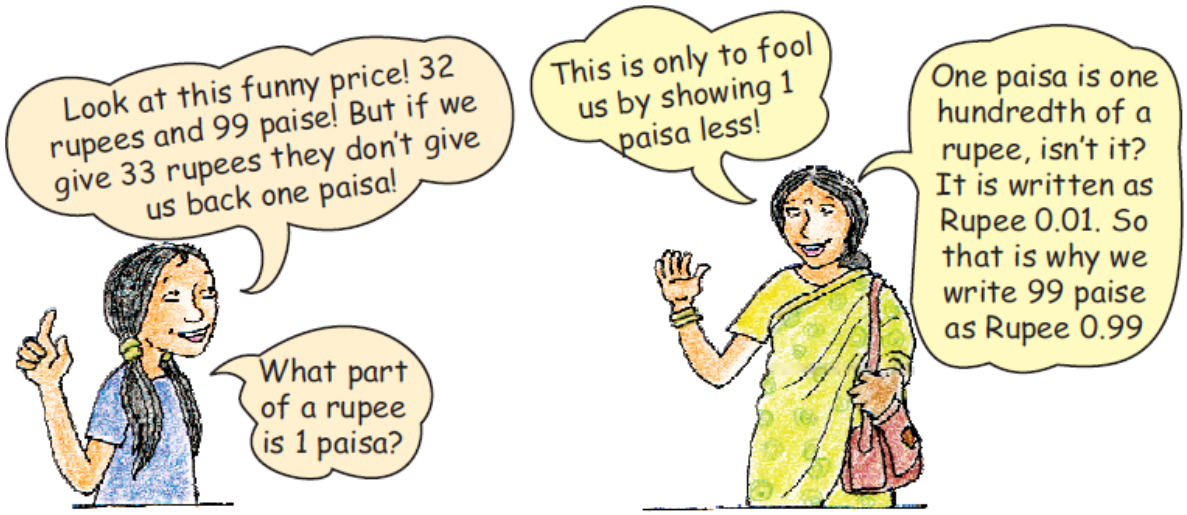
Answer-

Size of	Your guess in cm		Your measure in cm	
	length	width	length	width
100 Rupee note	15.0	6.0	15.4	7.2
10 Rupee note	12.0	5.0	13.6	6.2
20 Rupee note	14.0	6.4	14.7	6.2
5 Rupee note	11.4	6.4	11.6	6.2
Post card	13.0	8.0	14.4	9.4
Math-Magic book	27.0	21.0	28.4	21.4

Here, the difference between measurement and guess is

Size of	Difference in cm	
	length	width
100 Rupee note	0.4	1.2
10 Rupee note	1.6	1.2
20 Rupee note	0.7	0.2
5 Rupee note	0.2	0.2
Post card	1.4	1.4
Math-Magic book	1.4	0.4

12.At the market



1. How many paise does a matchbox cost?

Answer-

The matchbox costs 50 paise.

2. How many matchboxes can be got for Rs. 2.50?

Answer-

5 matchboxes can be got for Rs. 2.50.

3. How many rupees does the soap cost?

Answer-

The soap costs Rs. 8.75.

4. Arun wanted to buy soap. He has a five-rupee coin, 2 one-rupee coins and 4 half-rupee coins. Write in rupees what money he will get back?

Answer-

Money with Arun = $(5 \times 1) + (1 \times 2) + (4 \times 0.5)$

We get

$= 5 + 2 + 2$

= Rs. 9

We know that

Cost of one soap = Rs. 8.75

So, Arun will get back = 9 – 8.75

It can be written as

= (900 – 875) paise

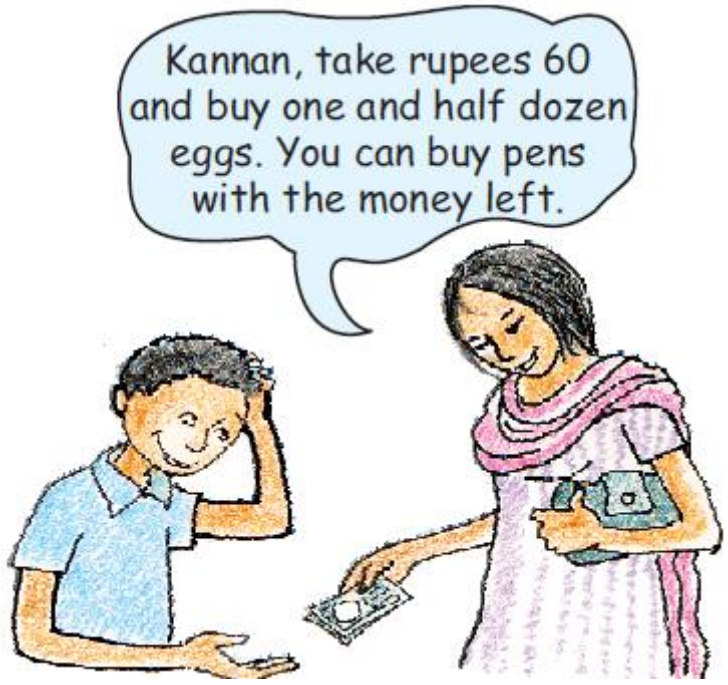
= 25 paise

= Re. 0.25

4Marks Questions

1. (a) An egg costs two and a half rupees. How much will one and a half dozen cost?

(b) How many pens can Kannan buy? How much money is left?



Answer-

(a) Cost of one egg = Rs. 2.50

So, the cost of one and a half dozen eggs = 12 + 6 = 18 eggs

Here, the cost of 18 eggs = 18 × 2.50

We can write it as

= 18 × 2 + 18 × 0.50

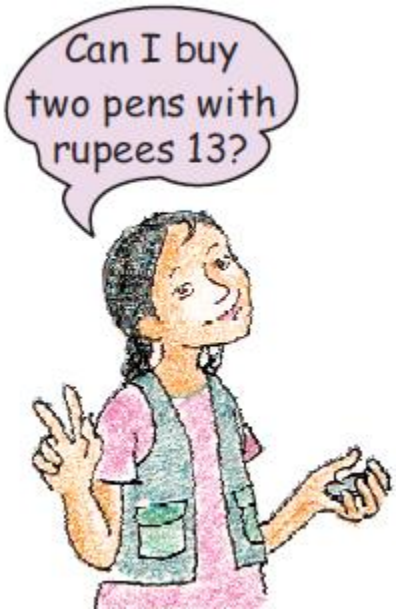
= 36 + 9

= Rs 45

So, the money left = 60 – 45 = Rs 15

(b) Kannan can buy 2 pens. The money left with him is Rs. 15.

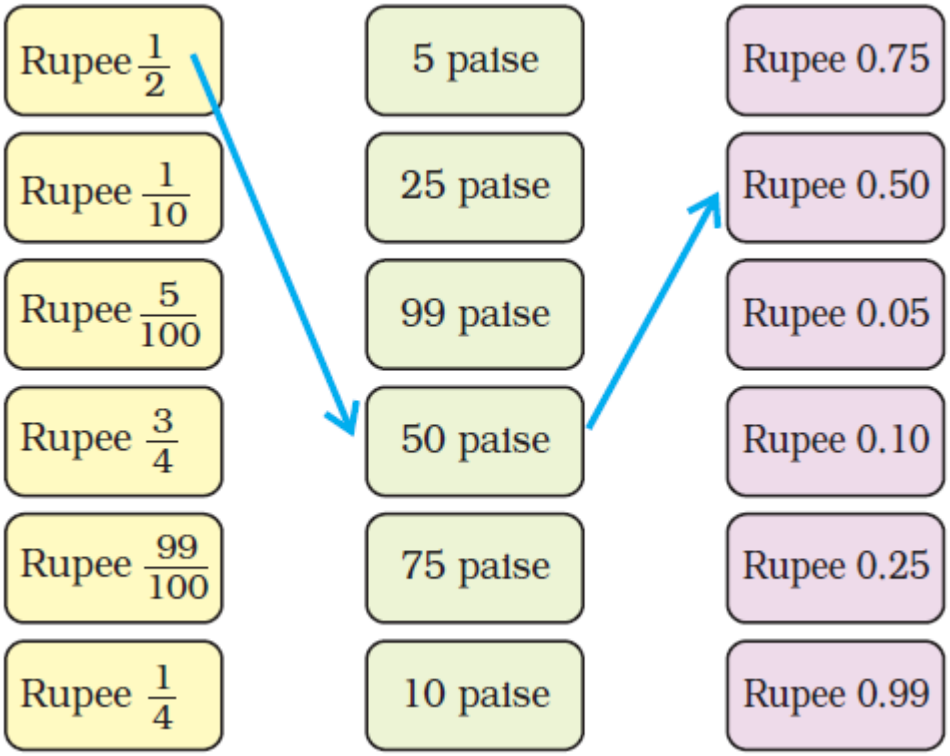
2. The price of two pens is Rs ____. Can she buy two pens?



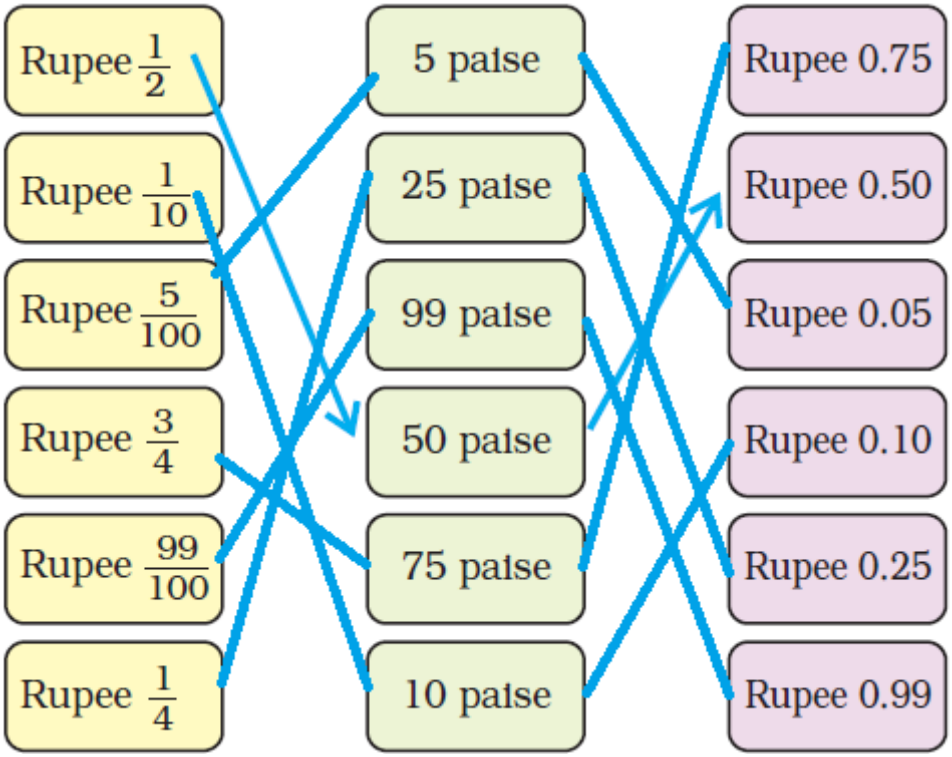
Answer-

Yes, she can buy two pens of price Rs. 13.

1. Match each yellow box with one green and one pink box.

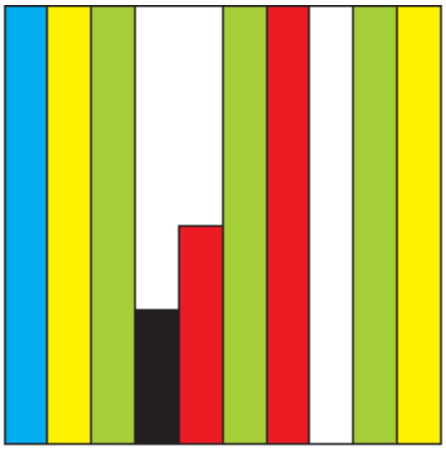

Rupee $\frac{1}{2}$
Rupee $\frac{1}{10}$
Rupee $\frac{5}{100}$
Rupee $\frac{3}{4}$
Rupee $\frac{99}{100}$
Rupee $\frac{1}{4}$
5 paise
25 paise
99 paise
50 paise
75 paise
10 paise
Rupee 0.75
Rupee 0.50
Rupee 0.05
Rupee 0.10
Rupee 0.25
Rupee 0.99

Answer-


Rupee $\frac{1}{2}$
Rupee $\frac{1}{10}$
Rupee $\frac{5}{100}$
Rupee $\frac{3}{4}$
Rupee $\frac{99}{100}$
Rupee $\frac{1}{4}$
5 paise
25 paise
99 paise
50 paise
75 paise
10 paise
Rupee 0.75
Rupee 0.50
Rupee 0.05
Rupee 0.10
Rupee 0.25
Rupee 0.99

10Marks Questions

1.Colourful Design



1. What part of this sheet is coloured blue? __/ 10

Answer-

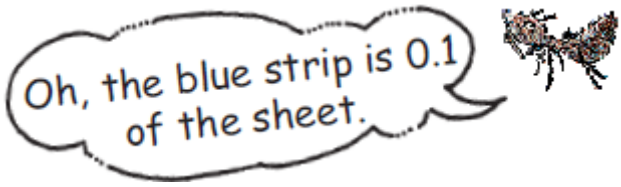
1/10 part of this sheet is coloured blue.

2. What part of the sheet is green?

Answer-

3/10 part of the sheet is green.

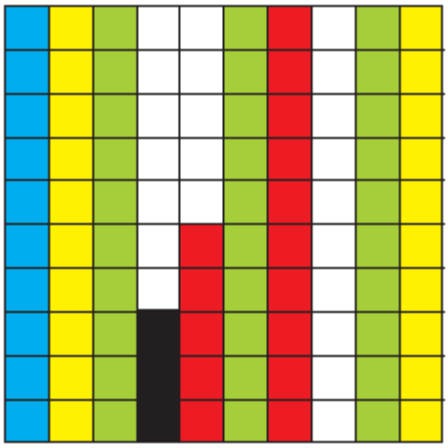
3. Which colour covers 0.2 of the sheet?



Answer-

Yellow colour covers 0.2 of the sheet.

4. Now, look at the second sheet. Each strip is divided into 10 equal boxes. How many boxes are there in all?



Answer-

There are 10 × 10 = 100 boxes in all.

5. Is each box 1/100 part of the sheet?

Answer-

Yes, each box is 1/100 part of the sheet.

6. How many blue boxes are there?

Answer-

There are 10 blue boxes.

7. Is blue equal to 10/100 of the sheet? We saw that blue is also equal to 1/10 of the sheet. We wrote it as 0.1 of the sheet.

Answer-

Yes, blue is equal to 10/100 of the sheet.

We know that

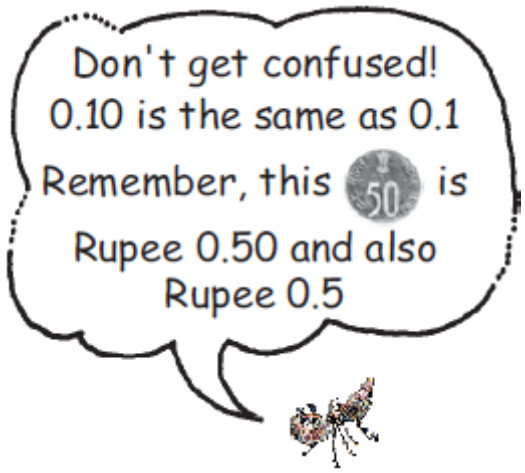
10/100 = 1/10 = 0.1

8. Can we say 10/100 = 1/10 = 0.10 = 0.1?

Answer-

Yes, we can say 10/100 = 1/10 = 0.10 = 0.1

9. Think: Can we write ten paise as 0.1 of a rupee?



Answer-

Yes, we can write ten paise as 0.1 of a rupee.

10. How many boxes are red? What part of the sheet is this? 15/ ___

Can we also write it as 0.15 on the sheet?

(Hint: Remember, we wrote 99 paise as 0.99 rupee!)

Answer-

15 boxes are red. It is the 15/100 part of the sheet.

Yes, we can also write it as 0.15 of the sheet.

11. Now, 3/100 of the sheet is black. We can say 0.__ sheet is black.

Answer-

Now, 3/100 of the sheet is black, and we can say 0.03 sheet is black.

12. How many white boxes are there on the sheet?

Answer-

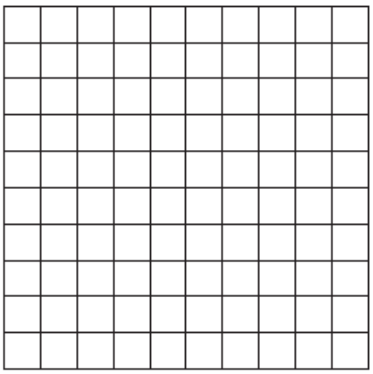
There are 22 white boxes on the sheet.

13. What part of the second sheet is white?

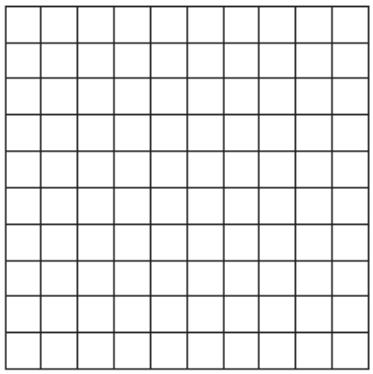
Answer-

22/100 part of the second sheet is white.

14. Make your designs?



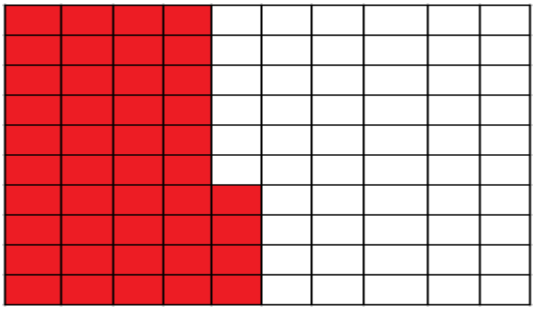
Make a nice design by colouring 0.45 part of this square red.



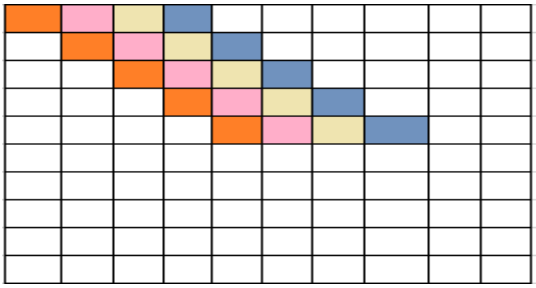
Use four colours. Each colour should cover 0.05 of this square.

Answer-

Colouring 0.45 part of this square red.

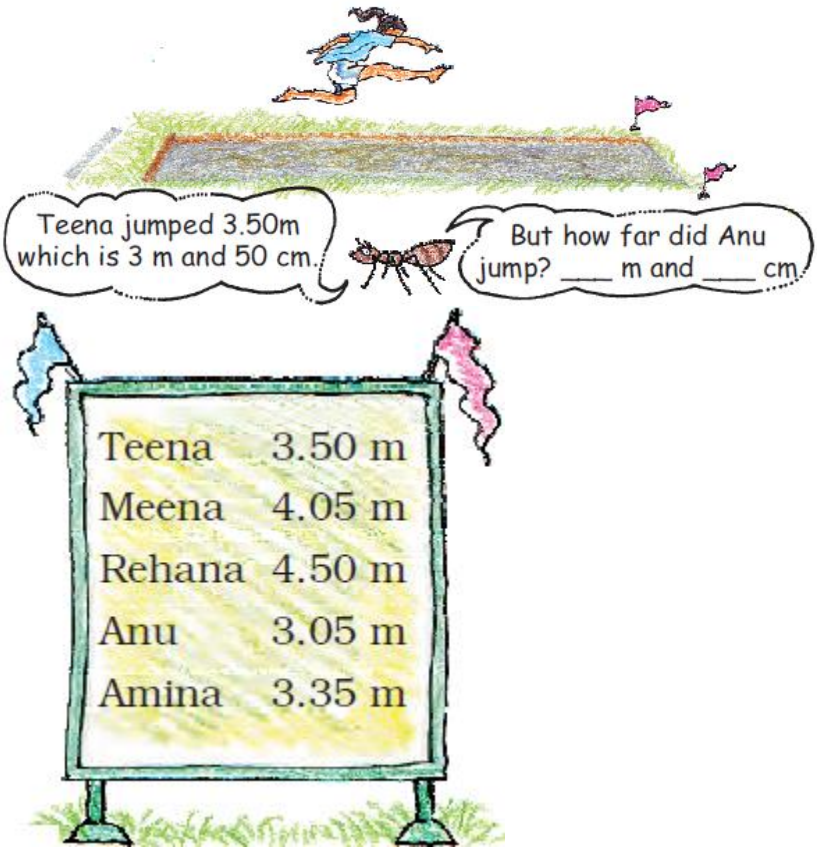


Four colours where each colour covers 0.05 of this square.



2.Sports Day

The school at Malappuram has its sports day. The first five children in the Long Jump are:



1. But how far did Anu jump? ___ m and ___ cm?

Answer-

Anu jumped 3 m and 5 cm.

2. Who is the winner in the long jump?

Answer-

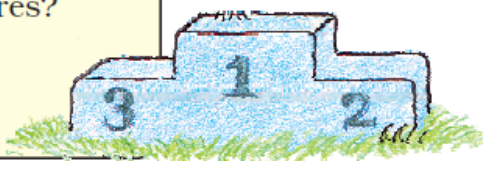
Rehana is the winner in the long jump.

3. Write the names of the I, II and III winners on this stand?

Do you remember that 1 metre = 100 centimetres?

So one centimetre is 1/100 of a metre.

We also write 1 cm as _____ m



Answer-

The names of the I, II and III winners are

I – Rehana

II – Meena

III – Teena

We also write 1 cm as 0.01 m.

Write in Metres

3 metre 45 centimetre		metres
99 centimetre		metres
1 metre and 5 centimetre		metres

Answer-

3 metre 45 centimetre = 3.45 m

99 centimetre = 0.99 m

1 metre and 5 centimetre = 1.05 m

How Big Can You Get

A)

After breathing out 1.52 m

On taking a deep breath 1.82 m

The difference in size ___. Do this for yourself and find the difference?

Answer-

Difference in size = 1.82 – 1.52 = 0.30 m

B)

What is Dinesh's height in metres?

_____ m _____ cm.

Answer-

It is given that

= 2 m – 45 m

We can write it as

= 200 cm – 45 cm

On further calculation,

= 155 cm

= 1 m 55 cm