

Chapter 2: Long and Short

NCERT · Class 4 · Maths

Questions

Question 1

Question: 1

Look at the picture and explain how Birbal made Akbar's line shorter.

Solution

Answer: Birbal drew a longer line than the line drawn by Akbar.

Question 2

Question: 2

Make her right arm 1 cm longer than the left arm.



Solution



Question 3

Question: 3

Draw a cup 1 cm shorter than this cup.



Solution

Answer: The cup drawn is 1 cm shorter than the given cup



Question 4

Question: 4

Draw a broom half as long as this broom.



Solution

Answer: A broom half of the size of the broom given in the figure is drawn below



Question 5

Question: 5

Draw another hair of double the length.



Solution

Answer: Hair of double length is drawn below



How Tall Have You Grown?

Question 6

Question: 6

Do you remember if you measured your height in Class 3?

Solution

Answer: Yes, I measured my height in Class 3

Question 7

Question: 7

Do you think you have grown taller?

Solution

Answer: Yes, I have grown taller

Question 8

Question: 8

How much?

Solution

Answer: About 5 cm

Question 9

Question: 9

Have your friends also grown taller?

Solution

Answer: Yes, most of them have grown taller

Question 10

Question: 10

Jhumpa once read a list of the tallest people in the world. One of them was 272 cm tall! That is just double of Jhumpa's height. How tall is Jhumpa? _____ cm.

Solution

Answer: Height of the tallest person = 272 cm

Which is double of Jhumpa's height

So,

$$272 \div 2 = 136 \text{ cm}$$

Hence, Jhumpa's height is 136 cm

Question 11

Question: 11

Could that person pass through the door of your classroom without bending?

Solution

Answer: Since, the door of the classroom is 230 cm high, the person cannot pass through it without bending.

Question 12

Question: 12

Will his head touch the roof of your house if he stands straight?

Solution

Answer: Yes, because the height of my classroom is 310 cm

The Long and Short of Your Family!

Question 13

Question: 13

Who is the tallest in your family?

Solution

Answer: My father is the tallest in my family. His height is 174 cm

Question 14

Question: 14

Who is the shortest in your family?

Solution

Answer: My brother is the shortest in my family. His height is 93 cm

Question 15

Question: 15

What is the difference between their heights?

Solution

Answer: The difference between their heights is 81 cm

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Question 16

Question: 16

(a) How far is Rehana from Arundhati?

Solution

Answer: The distance of Rehana from Arundhati is 3 metres.

(b) How far ahead is Rehana from Konkana and Uma?

Answer: Rehana is 6 metres ahead from Konkana and Uma

(c) How far are Konkana and Uma from the finishing line?

Answer: Konkana and Uma are 15 metres far from the finishing line

Question 17

Question: 17

Have you heard about a 1500 m or 3000 m race? (You remember that 1000 metres make 1 kilometre and 500 metres make half a kilometre.)

(a) In a 1500 metres race people run _____ km

Solution

Answer: In a 1500 metres race people run one and half km

(b) In a 3000 metres race people run _____ km

Answer: In a 3000 metres race people run 3 km

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Question 18

Question: 18

Have you heard about marathon races in which people have to run about 40 kilometres? People run marathons on roads because the track of a stadium is only 400 metres.

(a) 10 rounds of a stadium track = _____ km

Solution

Answer: 10 rounds of a stadium track = 400 metres $\times$ 10

= 4000 metres

= 400 $\div$ 1000

= 4 km

So, 10 rounds of a stadium track = 4 km

(b) So, if you run a marathon on a stadium track, you will have to complete rounds!

Answer: The number of rounds to be completed

$$= (40 \times 100) \div 100$$

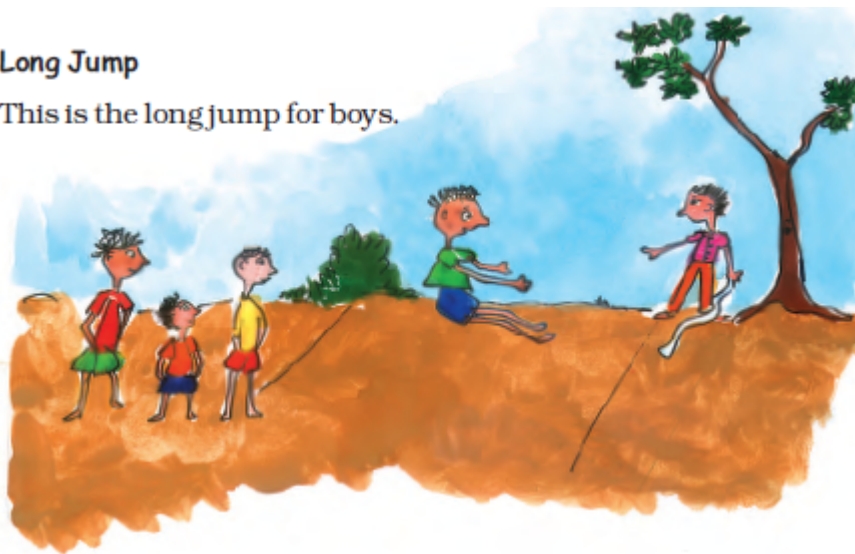
$$= 4000 \div 100$$

$$= 10$$

Hence, you have to complete 10 rounds on a stadium track

Long Jump

This is the long jump for boys.



Question 19

Question: 19

Dhanu has the longest jump of 3 metres 40 cm. Gurjeet is second. His jump is 20 cm less than Dhanu's. Gopi comes third. His jump is only 5 cm less than Gurjeet's jump.

How long are Gurjeet's and Gopi's jumps?

Solution

Answer: Gurjeet's jumps = Dhanu's jump – 20 cm

$$= 3 \text{ metres } 40 \text{ cm} - 20 \text{ cm}$$

$$= 3 \text{ metres } 20 \text{ cm}$$

Therefore, Gurjeet's jump is 3 metres 20 cm

Gopi's jump = Gurjeet's jumps – 5 cm

= 3 metres 20 cm – 5 cm

= 3 metres 15 cm

Therefore, Gopi's jump is 3 metres 15 cm

Here are the Indian Records and World Records for some jumps.

Sports	World Record	Indian Record
High Jump (Men)	Javier S. (2m 45 cm)	Chandra Pal (2m 17 cm)
Long Jump (Men)	Mike P. (8m 95 cm)	Amrit Pal (8m 8 cm)
High Jump (Women)	Stefka K. (2m 9 cm)	Bobby A. (1m 91 cm)
Long Jump (Women)	Galina C. (7m 52 cm)	Anju G. (6m 83 cm)

Question 20

Question: 20

Solution

Solution coming soon.

Find out from the table

Question 1

How many centimetres more should Chandra Pal jump to equal the Men's World Record for high jump?

Solution

Answer: We know that,

1 m = 100 cm

Given

Men's world record for high jump = 2 m 45 cm

= $2 \times 100 + 45$ cm

= 200 cm + 45 cm

$$= 245 \text{ cm}$$

High jump record of Chandra Pal = 2 m 17 cm

$$= 2 \times 100 + 17 \text{ cm}$$

$$= 200 \text{ cm} + 17 \text{ cm}$$

$$= 217 \text{ cm}$$

Now, subtract 217 from 245, we get

$$245 - 217 = 28 \text{ cm}$$

Hence, to equal the men's world record for high jump, Chandra Pal needs to jump 28 cm more.

Question 2

How many centimetres higher should Bobby A jump to reach 2 metres?

Remember that 1 m = 100 cm

Half metre =?

Solution

Answer: Bobby A, high jump record = 1 m 91 cm

$$= 1 \times 100 + 91 \text{ cm}$$

$$= 191 \text{ cm}$$

Required centimetres to reach is 2m

So,

$$= 2 \times 100$$

$$= 200 \text{ cm}$$

Thus,

$$200 - 191 = 9 \text{ cm}$$

Therefore, Bobby A should jump 9 cm higher to reach 2 metres

Question 3

Galina's long jump is nearly

- (a) 7 metres
- (b) 7 and a half metres
- (c) 8 metres

Solution

Answer: Galina's long jump record is 7 m 52 cm

Hence, it is nearly 7 and half metres,

Therefore option (b) is correct

Question 4

Look at the Women's World Records. What is the difference between the longest jump and the highest jump?

Solution

Answer: Women's World record for high jump = 2 m 9 cm

Women's World record for long jump = 7 m 52 cm

So, difference between them is

$$= 7 \text{ m } 52 \text{ cm} - 2 \text{ m } 9 \text{ cm}$$

$$= 5 \text{ m } 43 \text{ cm}$$

Question 5

If Mike P, could jump _____ centimetres longer, his jump would be full 9 metres.

Solution

Answer: Mike P long jump record = 8 m 95 cm

To reach 9 metres = 9 m – 8 m 95 cm

$$= 5 \text{ cm}$$

Therefore, if Mike P jump 5 cm longer, his jump would be full 9 metres

Question 6

Whose high jump is very close to two and half metres?

- (a) Stefka K.
- (b) Chandra Pal
- (c) Javier S.
- (d) Bobby A.

Solution

Answer: Javier S high jump is 2 m 45 cm. So, his jump is very close to two and half metres.

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Question 21

Question: 21

* How many rounds of the park must Devi Prasad run to complete 2 km?

Solution

Answer: We know that,

$$1 \text{ km} = 1000 \text{ m}$$

So,

$$2 \text{ km} = 2000 \text{ m}$$

Hence, to complete 2000 m, Devi Prasad must complete

$$= 2000 \text{ m} \div 400 \text{ m}$$

$$= 5 \text{ rounds}$$

Therefore, Devi Prasad has to complete 5 rounds of the park

* One day the weather was very good and a cool breeze was blowing. He felt so good that he kept jogging till he got tired after 8 rounds. That day he ran _____ km and _____ metres!

Answer: Distance covered to complete one round of the park = 400 m

So, distance covered by Devi Prasad to complete 8 rounds of the park = $400 \text{ m} \times 8$

= 3200 m

We know,

1000 m = 1 km

Therefore, 3200 m = 3000 m + 200 m

3000 m = $3000 \div 1000$

= 3 km 200 m

Hence, Devi Prasad ran 3 km 200 m to complete 8 rounds of the park

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Question 22

Question: 22

How far is Kozhikode from Thalassery? _____

Solution

Answer: Kozhikode distance from Thalassery

= Kozhikode distance + Thalassery distance

= 24 km + 46 km

= 70 km

How Far is Your Home from School?

Momun comes to school from very far. He first walks about 400 metres to the pond. With slippers in his hands, he then walks 150 metres through the pond. Next he runs across the 350 metres wide green field. Then he carefully crosses the 40 metres wide road to reach his school.



Question 23

Question: 23

*How much does Momun walk every day to reach school? _____

Solution

Answer: Total distance of school from Momun home = 400 m + 150 m + 350 m + 40 m

= 940 m

Therefore, Momun has to walk 940 m every day to reach school

* Is it more than 1 km? _____

Answer: Since, 940 m is less than 1000 m

Therefore, it is not more than 1 km

Question 24

Question: 24

Find out how far your friends live from school and fill the table. Write in metres or kilometres.

<i>Friend's name</i>	<i>Distance of home from school</i>

Solution

Answer: Following is the list of distance of school from their home

Friends Name	Distance of home from school
Sohail	500 m
Amit	2 km 100 m
Alok	1 km 400 m
Sanjeev	1 km 100 m
Rohit	5 km 400 m
Rahul	2 km 400 m

*** Who among you lives nearest to the school?**

Answer: A person who lives nearest to the school is Sohail

*** Who lives farthest from the school?**

Answer: A person who lives farthest from the school is Rohit

*** How many children live less than 1 km away from your school?**

Answer: Me and Sohail. That means total two children lives less than 1 km away from school

*** Is there anyone who lives more than 5 km away from the school?**

Answer: Yes, Rohit lives more than 5 km away from the school

*** How do they come to school?**

Answer: They come to the school by school bus.

Guess and Find Out

Question 25

Question: 25

How long is the thread in a reel?

Solution

Answer: The length of thread can be measured depending on the thickness of reel.

It may be 60 metres, 90 metres, 100 metres or 400 metres or more

Question 26

Question: 26

How long is the string of a kite reel? Can it be more than a kilometre long?

Solution

Answer: A kite reel can be more than a kilometre long. It may be 500 metres, 900 metres, 1000 metres long.

Question 27

Question: 27

If a handkerchief is made out of a single thread, how long would that thread be?

Solution

Answer: The length of thread may be about 4000 metres, if a handkerchief is made **out** of a single thread.

Try to find out:

Question 28

Question: 28

Which is the highest building that you have seen? About how many rooms high was it?

Solution

Answer: The highest building that I saw is Qutub Minar. It is about 25 rooms high

Question 29

Question: 29

How high can a kite go? Can it go higher than the Qutub Minar?

Solution

Answer: Yes, a kite can go higher than the Qutub Minar. It may go about 100 metres high.

Question 30

Question: 30

How high can a plane fly? Can it fly higher than Mount Everest which is about 9 km high?

Solution

Answer: A plane can fly more than 10000 metres high. Yes, it can fly higher than the Mount Everest which is about 9 km high.

Class 4 Maths Chapter 2, Long and Short, is a very interesting yet informative chapter that teaches students exactly what to study and how to study in the best manner possible. By introducing the topics of bricks with various shapes, it is easy to invoke upon a student's creativity and simultaneously improve upon their geometry skills.

The 4th class NCERT Maths Chapter 2, contains numerous examples explaining topics such as:

- Measuring length in centimeters
- Dot to dot distance

- Drawing math solutions lengthwise
- Measurement in meters
- Conversion of meters into centimeters

Solve problems based on these topics and get solutions below for all the type of maths questions in Chapter 2, given here;

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