



**Mathematics**

**Class- 4**

**Chapter 2-LONG AND SHORT**

Q1. Jhumpa once read a list of the tallest people in the world. One of them was 272cm tall. That is just double of Jhumpa's height. How tall is Jhumpa?

Ans. Jhumpa's height is half of the height of the tallest persons in the world=272cm

Therefore, Jhumpa's height =  $(272 \div 2)$  cm

$$= 136\text{cm}$$

Thus, Jhumpa is 136cm tall.

Q2. Could that person pass through the door of your classroom without bending?

Ans. No.

Q3. Will his head touch the roof of your house if he stands straight.

Ans. No.

Q4. Who is the tallest in your family?

Ans. My father is the tallest in our family (assumption).

Q5. Who is the shortest in your family?

Ans. My brother is the shortest in my family (assumption).

Q6. What is the difference between their heights?

Ans. The difference between their heights is 35cm.

Q7. This is a 100meter race for girls. Arundhiti is nearest the finishing line. She is about 6 meters from it. Behind her is Rehana, Konkana and Uma are running behind Rehana. Look at the picture.

To answer the questions below choose from these distances.

- 3 meters
- 6 meters
- 10 meters
- 15 meters

a) How far is Rehana from Arudhiti?

Ans. The distance between Rehana and Arudhiti is 3 meters

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

Ans. Rehana is 6 meters ahead of Konkana and Uma.

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

Ans. Distance of the finishing line from Konkana and Uma

$$= 6m + 3m + 6m$$

$$= 15\text{meters.}$$

Q8. Have you heard about 1500m or 3000m race?(You remember that 1000m make 1km and 500 meters make half a kilometer ).

So we can say –

In a 1500 meters race people run 1.5 km.

In a 3000 meters race people run 3km.

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

Find out from the table

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

Q9. How many centimeters more should Chandra Pal jump to equal the men's world record for high jump?

Ans. Men's world record for high jump

$$= 2\text{m} + 45\text{cm}$$

$$= 245\text{cm}.$$

High jump record of

Chandra Pal = 2m 17cm

$$= 217\text{cm}$$

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

Thus, Chandra Pal should jump 28cm more to equal the men's world record of high jump.

Q10. How many centimeters higher should Bobby A jump to reach 2 meters. Remember that 1m = 100cm.

$$\text{Half metre} = 50\text{cm}.$$

Ans. High jump of Bobby A = 1m 19cm

$$= 191\text{cm}.$$

$$\text{Now, } (200 - 191) = 9\text{cm}.$$

Thus, Bobby A should jump 9cm higher to reach 2 meters.

Q11. Galinac's long jump is nearly.

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



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Ans. Galina C.'s long jump = 7m + 52c = 752cm.

$$\text{We know } 7\text{m} = 700\text{cm}$$

$$8\text{m} = 800\text{cm}.$$

Thus, Galina C's long jump is nearly 7 and half metres.

Q12. Look at the Women's world records. What is the difference between the longest jump and the highest jump?

Ans. Long jump of Galina C. =  $7\text{m} + 52\text{cm}$ .

$$= 752 \text{ cm.}$$

High jump of Stefka K =  $2\text{m} + 9\text{cm}$ .

$$= 200\text{cm} + 9\text{cm} = 209\text{cm}$$

Difference between

$$\text{Longest jump and the highest jump} = (752 - 209) \text{ cm} = 543 \text{ cm.}$$

Q13. If Mike P could jump 5cm longer, his jump would be full 9 metres .

Whose high Jump is very close to two and half metres.

- a) Stefka K
- b) Chandra Pal
- c) Janvier S
- d) Bobby A

Ans. Two and half metres.

$$= 2\text{m} + 50\text{cm} = 250\text{cm}$$

Stefka's jump = 209cm.

Chandra Pal jump = 217cm.

Javier S 's jump = 245cm.

Bobby A's jump = 191cm.

245cm is very close to 250cm. Thus, the high jump of Javier S. is very close to two and half.

- The doctor has told Devi Prasad to run 2km every day to stay fit. He took 1 round of this field. How far did he run?  
The field was very far from his home. So, he chose a park nearby. The boundary of the park was about 400m long.

Q1. How many rounds of the park must Devi Prasad run to complete 2km?

Ans. Boundary of the park = 400m.

$$2\text{km} = 2 \times 1000 = 2000\text{m}$$

No. of rounds Devi Prasad run to complete 2km =  $2000 \div 400$

$$= 5$$

Q. 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.

Ans. Distance covered by Devi Prasad to take one round = 400m.

Distance covered by Devi Prasad to take 8 rounds of the park

$$= 400\text{m} \times 8$$

$$= 3200\text{m}$$

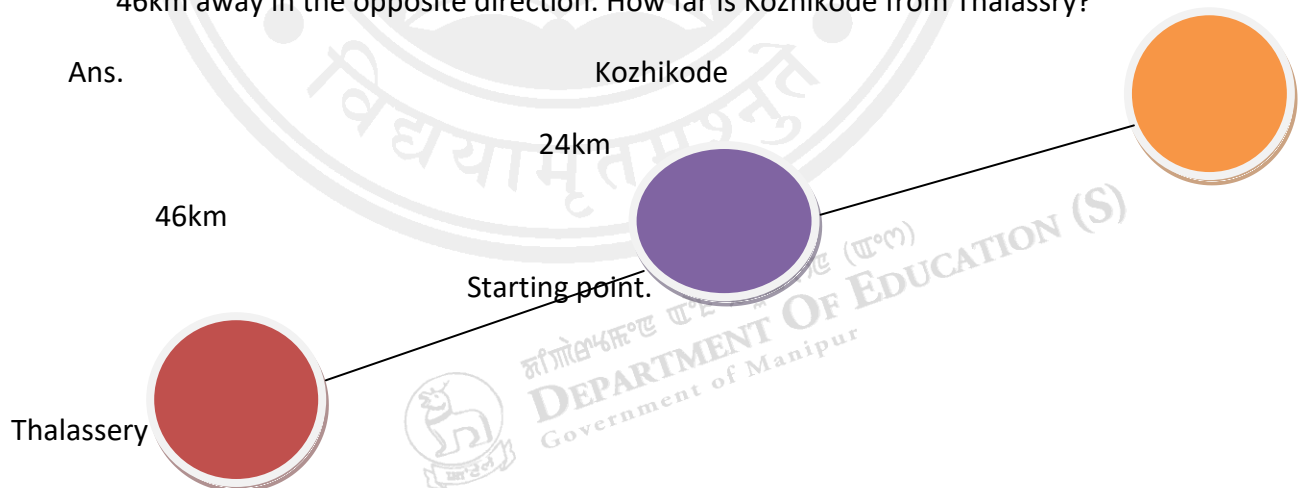
$$1000\text{m} = 1\text{km}$$

Therefore,  $3200\text{m} = 3\text{km} + 200\text{m}$ .

Thus, Devi Prasad ran 3km 200m to take 8 rounds of the park.

- Subodh is going to Kozhikode which is 24km away. Manjani is going to Thalassery which 46km away in the opposite direction. How far is Kozhikode from Thalassery?

Ans.



Suppose Subodh and Manjani start from same point.

Distance of Kozhikode from the starting point = 24km.

Distance of Thalassery from starting point = 46km.

Subodh is going to Kozhikode and Manjani is going to Thalassery. They are going in opposite direction.

Distance between Kozhikode and Thalassery =  $(24 + 46)$  km

= 70km.

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

Q. How much does Momun walk every day to reach school?

Ans. Distance covered by Momun to reach the pond = 400m

Distance covered by Momun while walking through the pond = 150m

Distance covered by Momun to cross the road = 40m

Total distance =  $(400 + 150 + 350 + 40)$  m

= 940m

Thus, Momun walks 940m everyday to reach the school.

Q. Is it more than 1km?

Ans. No, [1km = 1000m]

Friend's name	Distance of home from school
Koroulemba	4km
Paikhomba	2km
Wubin	6km
Subaschandra	7km
Manglemba	5km
Ninghai	3km

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

Q. Who among you lives nearest to school?

Ans. Paikhomba

