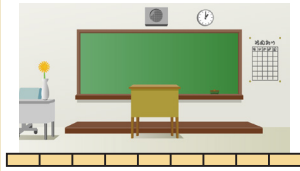


# 5 - 1

## Length

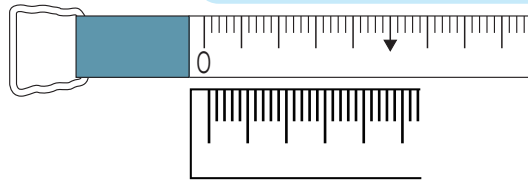
### Tape Measure

**Instruction** How to measure the size of a classroom?



We need to measure many times using a ruler. So...

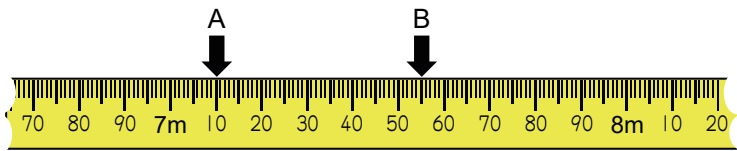
Why don't we use another tool, a tape measure?



Set the "0" position on the scale, carefully.

### Example

1 Read the lengths of the ↓ on the tape measures below.

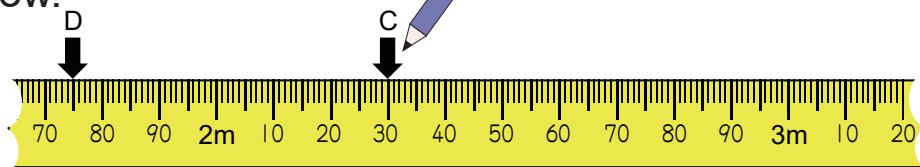


A is  m  cm.

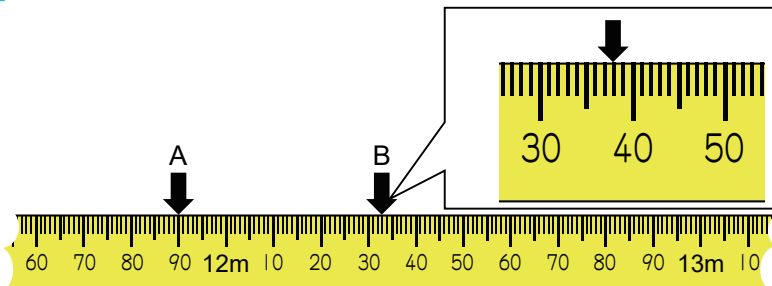
B is  m  cm.

2 Draw an ↓ to show the lengths of C and D on the tape measure below.

C : 2 m 30 cm  
D : 1 m 75 cm



1 Read the lengths of the ↓ on the tape measures below.



A is  m  cm.

B is  m  cm.

2 Draw an ↓ to show the lengths of C, D and E on the tape measure below.

C : 2 m 50 cm  
D : 2 m 80 cm  
E : 3 m 50 cm

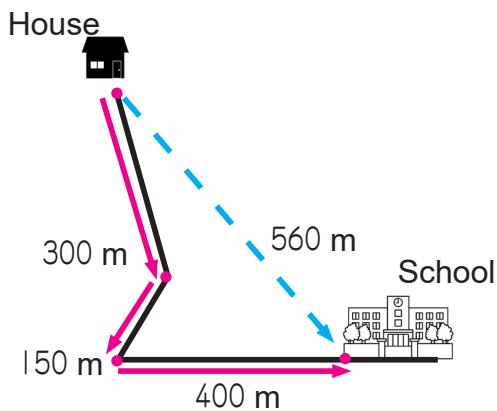


# 5 - 2

## Length

### Direct Distance and Travel Distance

**Example** What is the length in metres of a straight line from a boy's house to the school? What is the length in metres of the side streets from the house to the hospital?



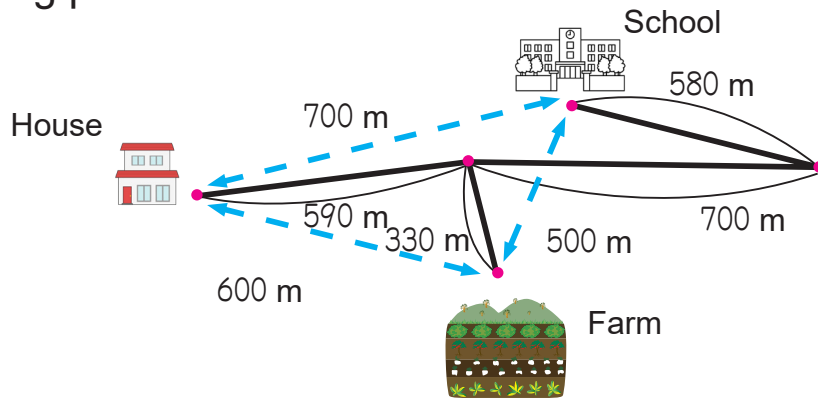
The length of a straight line between two places is called “**direct distance.**” And the length along streets between two places is called “**travel distance.**”



Direct distance is  m    Travel distance is  m



What is the direct distance and the travel distance between the following places?



- 1 Between the house and the farm.  
Direct distance is  m.    Travel distance is  m.
- 2 Between the farm and the school.  
Direct distance is  m.    Travel distance is  m.
- 3 Between the house and the school.  
Direct distance is  m.    Travel distance is  m.

# 5 - 3

## Length

### Units of Long Length

**Example 1** Convert the lengths.

$$1050 \text{ m} = \boxed{1} \text{ km } \boxed{50} \text{ m.}$$

1000 m is the same as 1 kilometer and it can be written.



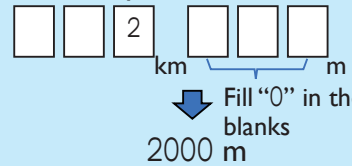
**Example 2** Convert the lengths to m / km and m.

1  $2 \text{ km} = \boxed{2000} \text{ m}$

2  $1 \text{ km } 400 \text{ m} = \boxed{1400} \text{ m}$

1 km = 1000 m  
1 m = 100 cm  
1 cm = 10 mm

This is a tip for conversion.



Convert the lengths to m, km / km and m.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
			km				m

1  $1000 \text{ m} = \boxed{\phantom{000}} \text{ km}$

2  $5000 \text{ m} = \boxed{\phantom{000}} \text{ km}$

3  $1200 \text{ m} = \boxed{\phantom{00}} \text{ km } \boxed{\phantom{00}} \text{ m}$

4  $2650 \text{ m} = \boxed{\phantom{00}} \text{ km } \boxed{\phantom{00}} \text{ m}$

5  $3776 \text{ m} = \boxed{\phantom{00}} \text{ km } \boxed{\phantom{00}} \text{ m}$

6  $8848 \text{ m} = \boxed{\phantom{00}} \text{ km } \boxed{\phantom{00}} \text{ m}$

7  $3 \text{ km } 900 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

8  $5 \text{ km } 350 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

9  $7 \text{ km } 40 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

10  $4 \text{ km } 24 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

11  $6 \text{ km } 5 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

12  $1 \text{ km } 2 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

13  $9 \text{ km } 175 \text{ m} = \boxed{\phantom{0000}} \text{ m}$

14  $10 \text{ km} = \boxed{\phantom{0000}} \text{ m}$

# 5 - 4

## Length

### Various Units of Length

**Example** Fill in the  with the appropriate unit of length.

1 The length of a pencil.

15

cm

2 The thickness of a notebook.

3

mm

3 The distance walked in an hour.

4

km

Fill in the  with the appropriate unit of length.

1 The width of a notebook.

21

2 The length of a classroom.

8

3 The length between ruled lines in a notebook.

7

4 The length of a step.

60

5 The distance walking in an hour.

5

6 The length of a pen.

12

7 The width of a staple.

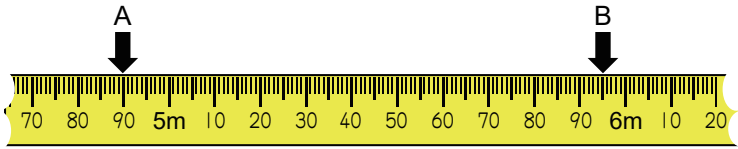
8

# 5 - 5

## Length

### Review

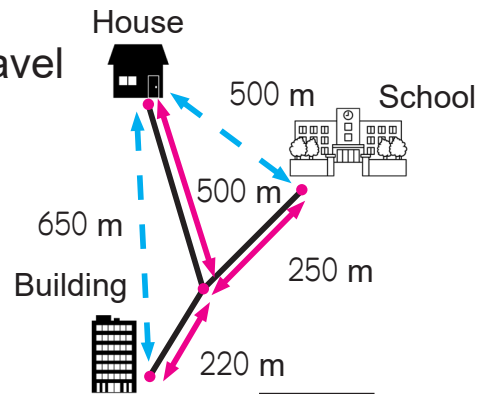
1 Read the lengths of the ↓ on the tape measure below.



A is  m  cm.

B is  m  cm.

2 What is the direct distance and the travel distance between the following places?



1 Between the house and the building.

Direct distance is  m

Travel distance is  m

2 Between the house and the school.

Direct distance is  m

Travel distance is  m

3 Convert the lengths to m, km / km and m.

km       m

1 1 km =  m

2 3000 m =  km

3 1 km 500m =  m

4 5895 m =  km  m

4 Fill in the  with the appropriate unit of length.

1 The travelling distance of a hiking trail.

15

2 The thickness of a coin.

1