

Exercise 22.2

Question: 1

The following are the details or the number of students in a class of 30 students presents a week.

Day	Number of students present
Monday	24
Tuesday	20
Wednesday	28
Thursday	30
Friday	26
Saturday	22

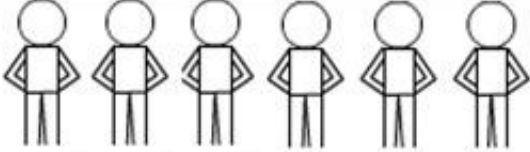
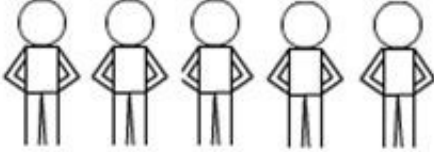
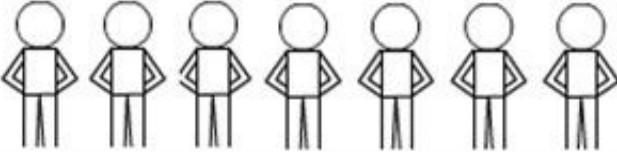
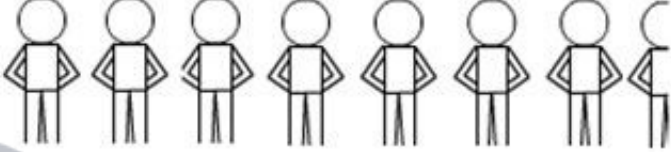

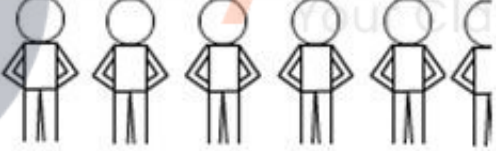
Represent the above data by a pictograph.

Solution:

Let an icon of a student represent 4 students. Then, the number of icons for each day is as follows:

Day	Number of students present
Monday	$24 / 4 = 6$
Tuesday	$20 / 4 = 5$
Wednesday	$28 / 4 = 7$
Thursday	$30 / 4 = 7.5$
Friday	$26 / 4 = 6.5$
Saturday	$22 / 4 = 5.5$

The pictograph representing the above data is as follows:

Day	Number of students present
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

Question: 2

Total number of students of a school in different years is shown in the following table:

Year	Number of students
1996	400
1998	550
2000	450
2002	600
2006	650

Represent the above data by a pictograph.

(a) Prepare a pictograph of students using one symbol an icon of a student to represent students and answer the following questions:

(i) How many symbols represent total number of students in the year 2002?

(ii) How many symbols represent total number of students for the year 1998?

(b) Prepare another pictograph of students using any other symbol each represents students. Which pictograph do you find more informative?

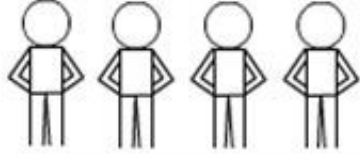
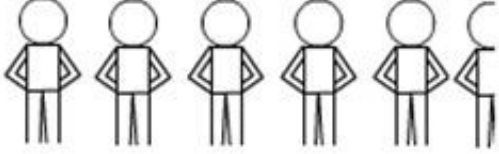
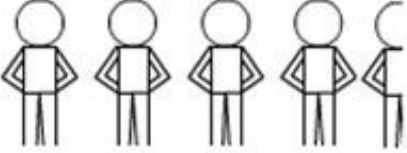
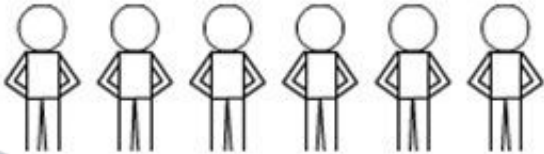

Solution:

(a) Let one icon represent 100 students.

Then, the numbers of icons for different years are as follows:

Year	Number of students
1996	$400 / 100 = 4$
1998	$550 / 100 = 5.5$
2000	$450 / 100 = 4.5$
2002	$600 / 100 = 6$
2006	$650 / 100 = 6.5$

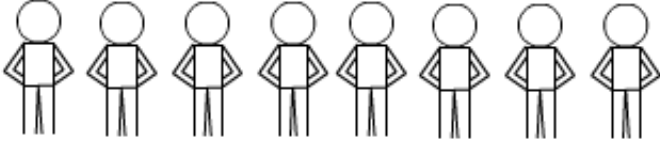
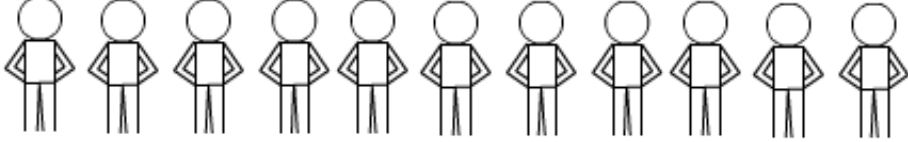
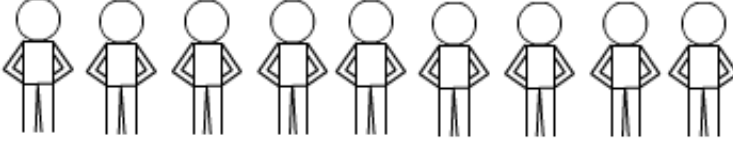
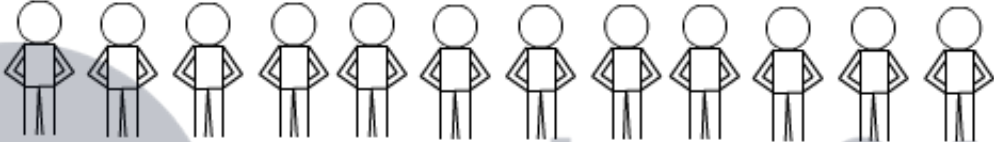

The pictograph representing the above data is as follows:

Year	Number of students
1996	
1998	
2000	
2002	
2004	

- (i) 6 icons represent the total number of students in the year 2002.
- (ii) 5 and half icons represent the total number of students in the year 1998.
- (b) Let one icon represent 50 students.

Then, the numbers of icons for different years are as follows:

Year	Number of students
1996	$400 / 50 = 8$
1998	$550 / 50 = 11$
2000	$450 / 50 = 9$
2002	$600 / 50 = 12$
2006	$650 / 50 = 13$

Year	Number of students
1996	
1998	
2000	
2002	
2004	

The second pictograph is more informative.

Explanation: in the second pictograph, every icon is complete, therefore more convenient to understand.