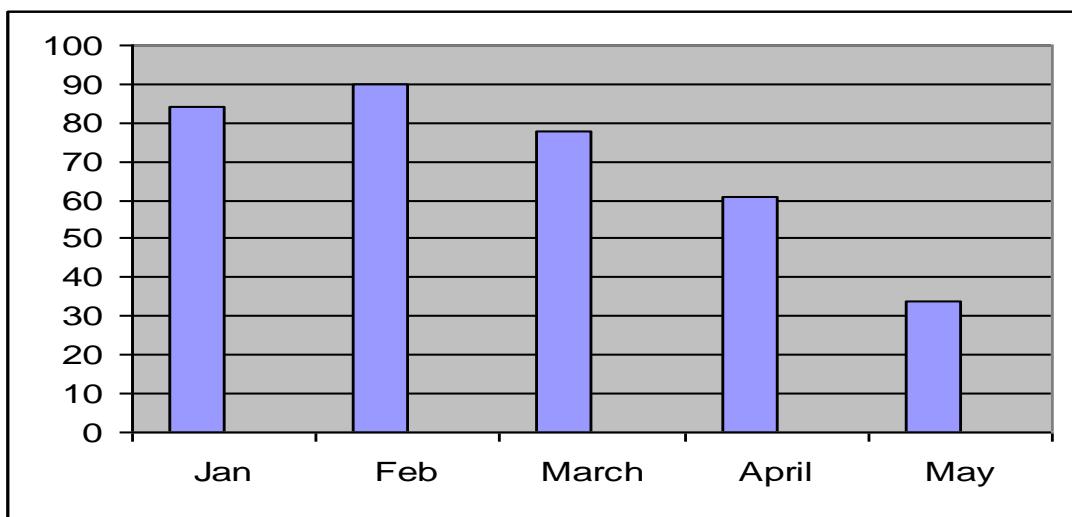


Unit Standard 9009

Activity 1 (SO1, AC1-7)

1. Study the bar graph above and then answer the questions.



How many ice creams were sold during January?

During which month were the most ice creams sold?

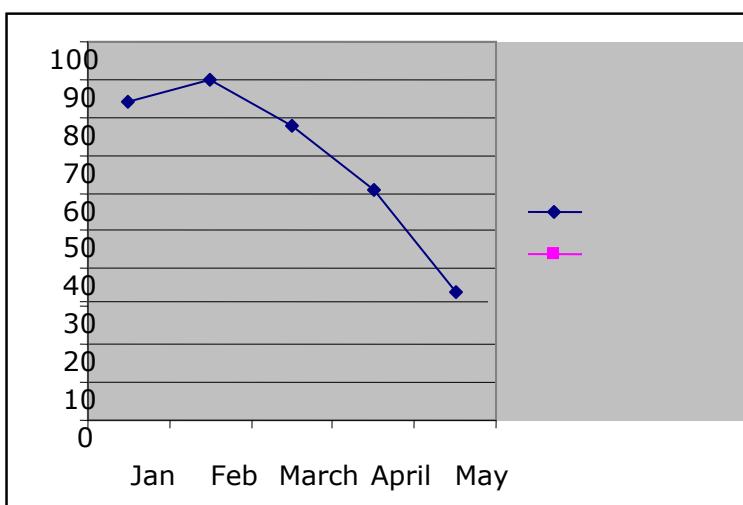
In which month were the least ice creams sold?

What was the total number of ice creams sold for the period?

2. Study the line chart on the next page and then answer the questions below

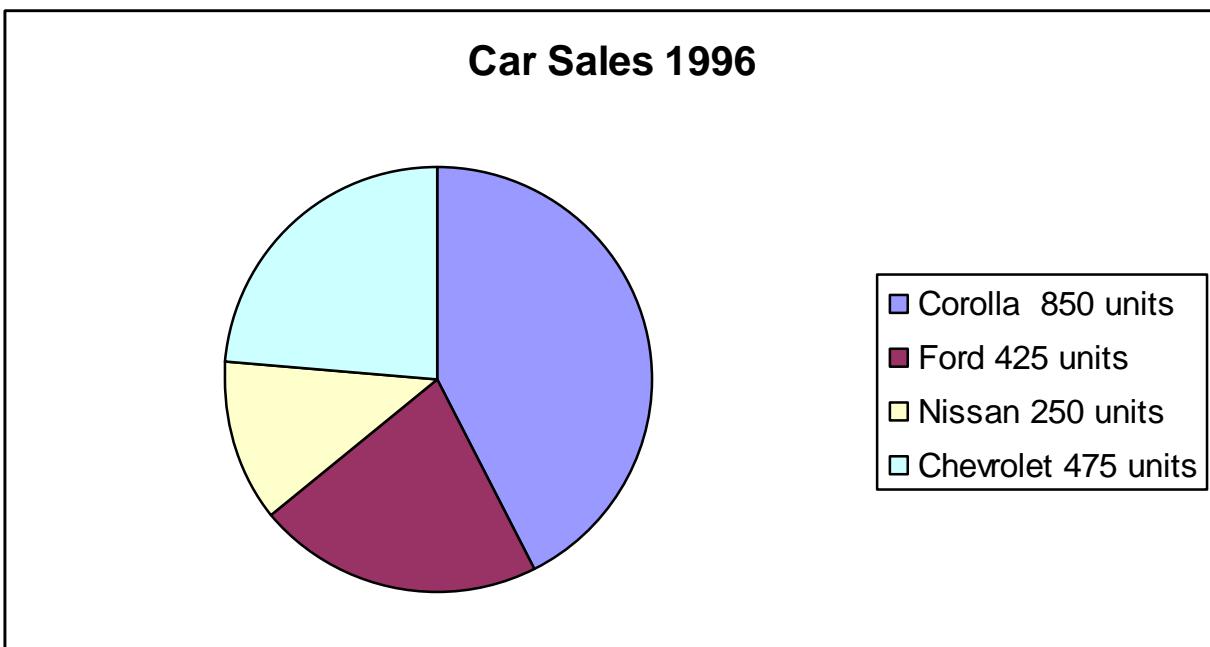
What tendencies do you pick up from this graph?

When would be a good time to start a new ice cream business?



3. Study the pie chart below and then answer the questions

Which company sold most cars?	
Which company sold the smallest percentage of cars?	
How many cars did Chevrolet sell during 1996?	



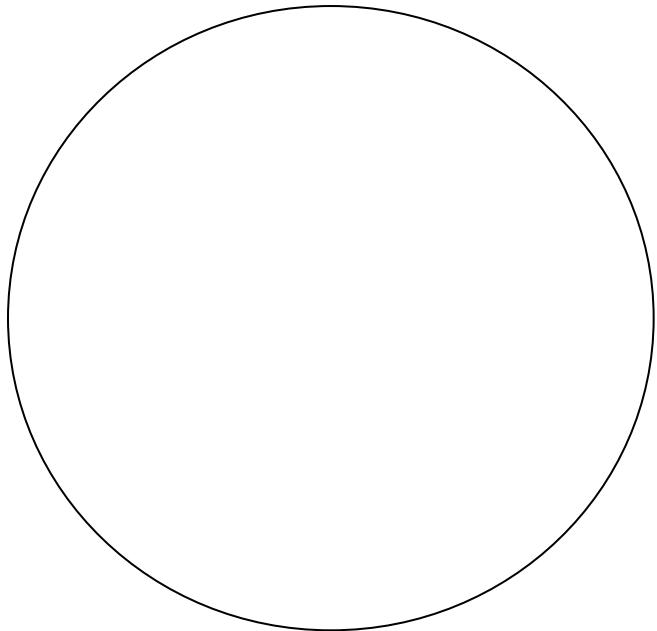
4. In a group draw a column chart or a bar chart for the following information. Use the grid on the next page to help you.

Why do you use a taxi to and from work	Cheap	1631
	Fast	1091
	Safe	312
	Convenient	1849

2200				
2000				
1800				
1600				
1400				
1200				
1000				
800				
600				
400				
200				
	Cheap	Fast	Safe	Convenient

5. In a group, draw a pie chart for the following information. A total of 2000 replies were received. Use the pie below to help you.

Which taxi route do you use every day?	Route A	755
	Route B	830
	Route C	415

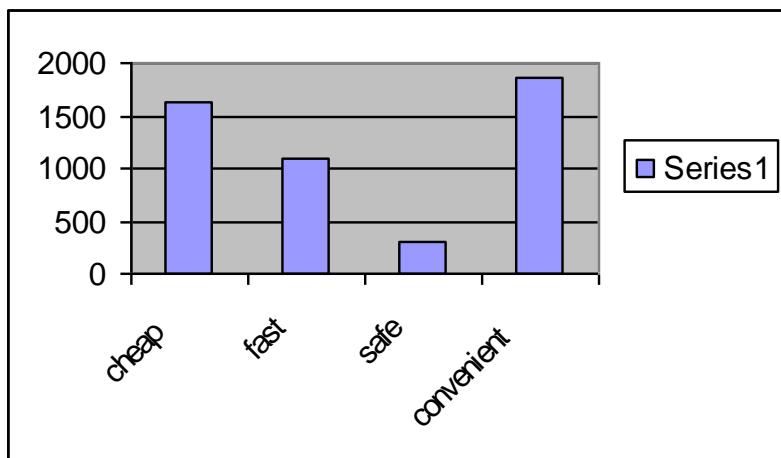


6. Draw a column chart to show the average marks per term.

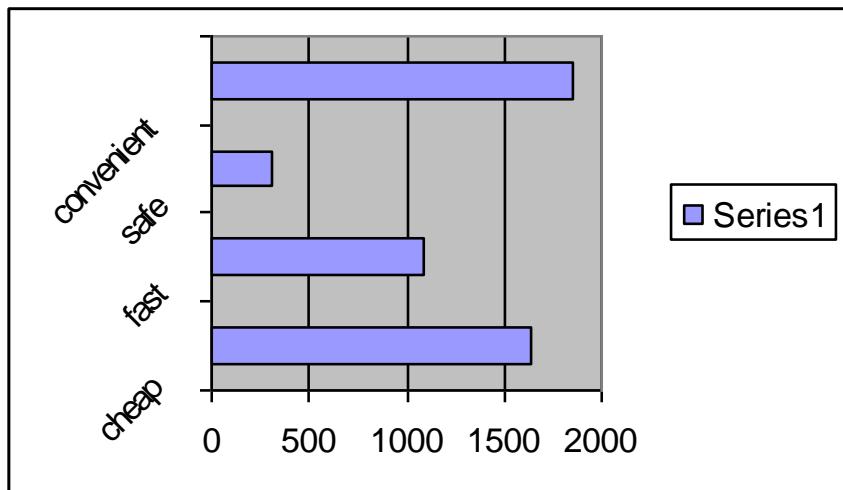
1st quarter	2nd quarter	3rd quarter	4th quarter
55.16	54.16	53.50	59.16

Ideally, your charts should look as follows:

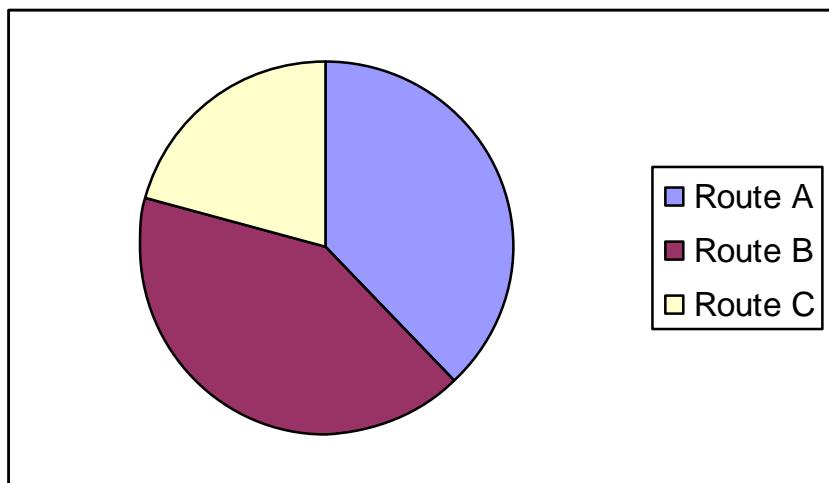
Your information as a column chart



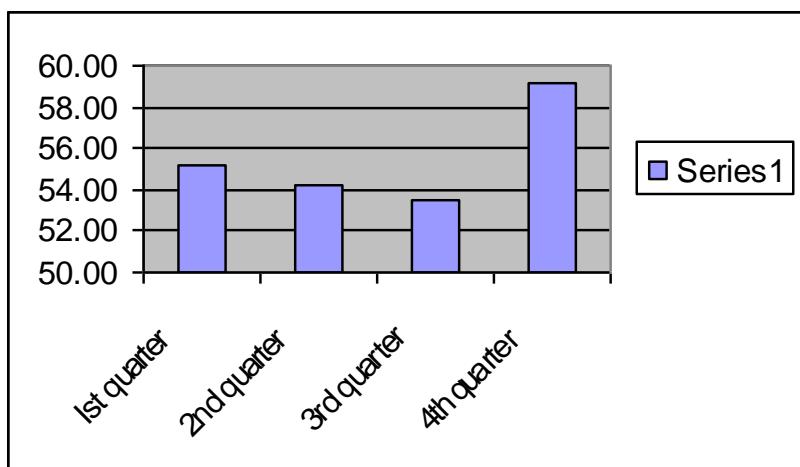
Your information as a bar chart



Pie Chart



Average of school marks for the year:



Activity 2 (SO1, AC4-7)

1. Use the names of learners in your class and the number of children they have to complete the table on the following page:

Names of Learners in your class	Number of Children					
	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

We would like to indicate how many learners (number of cases) fall within the class intervals. The class intervals range from 0 – 1 children, 2 – 3 children etc.

Class Interval	Tally (number of learners)	Number of children
0 - 1		
2 - 3		
4 - 5		
6 and more		
TOTAL:		

What is the range of the data set?

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at john.smith@researchinstitute.org.

2. From the table below, calculate the average for the other subjects:

	1st quarter	2nd quarter	3rd quarter	4th quarter
subject				
English	60	62	66	71
Geography	73	69	61	76
History	51	49	55	53
Mathematics	43	41	39	45
Science	46	43	47	53
Second language	58	61	53	57

3. Calculate the average per term:

4. In a group, do the following: In each case state which of the three statistics is not an appropriate description of the given data. Order the data and draw a histogram of the data to see how it is distributed. If it is evenly distributed, the mean is most probably the best summary. If not, consider the median. If there are many occurrences of the same value, consider using the mode.

5 7 2 3 8 1 5 2 6
6 2 9 0 3 2 0 2 1 3 1 0 2
21 30 14 5 16 24 17 3 29

Activity 3 (SO2, AC1-3), (SO1, AC3-6)

In a group, study the tables and graphs that follow and answer the following questions:

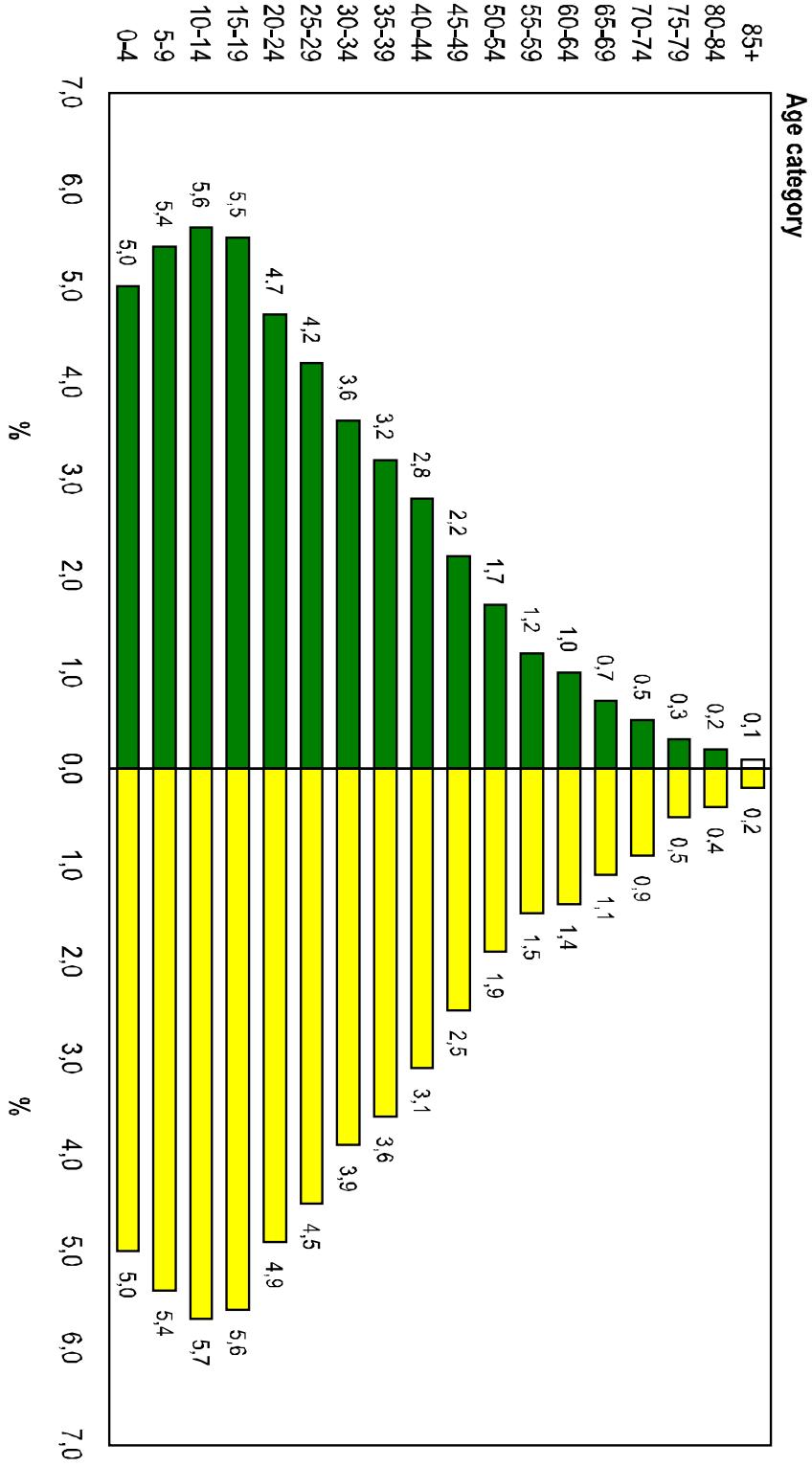
Which male age group is the biggest percentage?

What percentage of females fall into the 35-29 age group?

Which gender makes up the bigger percentage of the total population?

In the age group 80 to 84, which gender is the bigger percentage?

Age	Male	%	Female	%	Total	%
0-4	2,223,731	10.3%	2,226,085	9.5%	4,449,816	9.9%
5-9	2,425,804	11.3%	2,427,751	10.3%	4,853,555	10.8%
10-14	2,518,956	11.7%	2,542,961	10.8%	5,061,917	11.2%
15-19	2,453,079	11.4%	2,528,642	10.8%	4,981,721	11.1%
20-24	2,099,293	9.7%	2,195,230	9.3%	4,294,523	9.5%
25-29	1,899,124	8.8%	2,035,814	8.7%	3,934,938	8.7%
30-34	1,594,488	7.4%	1,746,412	7.4%	3,340,900	7.4%
35-39	1,441,507	6.7%	1,630,264	6.9%	3,071,771	6.8%
40-44	1,233,632	5.7%	1,385,832	5.9%	2,619,464	5.8%
45-49	967,604	4.5%	1,119,776	4.7%	2,087,380	4.6%
50-54	769,499	3.5%	868,521	3.7%	1,638,020	3.6%
55-59	552,323	2.5%	652,943	2.7%	1,205,266	2.6%
60-64	444,510	2.0%	620,784	2.6%	1,065,294	2.3%
65-69	304,763	1.4%	483,164	2.0%	787,927	1.7%
70-74	232,547	1.0%	398,922	1.7%	631,469	1.4%
75-79	136,436	0.6%	231,101	0.9%	367,537	0.8%
80-84	90,835	0.4%	180,111	0.7%	270,946	0.6%
85+	45,907	0.2%	111,425	0.4%	157,332	0.3%
Total	21,434,038	99.1%	23,385,738	99.0%	44,819,777	99.1%



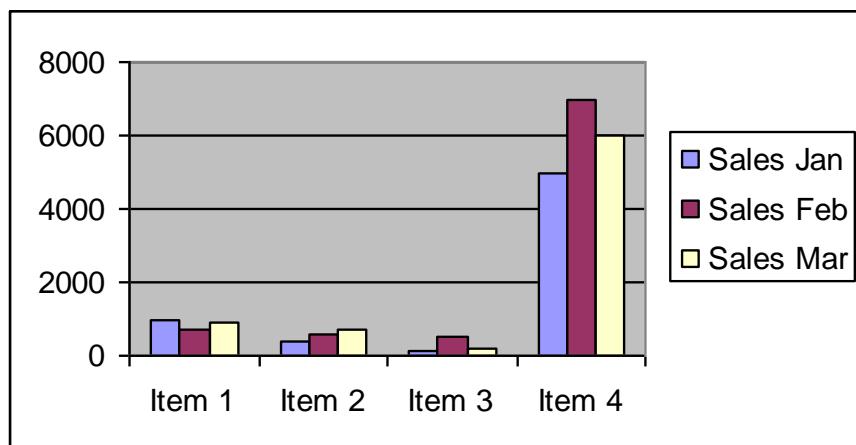
The table below shows the number of units that were sold per item. Of which item were the most products sold?

During which month were the sales of this item the highest?

Which item sold the least number of units?

During which month were the sales of this item the lowest?

Sales			
	Jan	Feb	Mar
Item 1	1000	700	900
Item 2	400	600	700
Item 3	100	500	200
Item 4	5000	7000	6000
Totals	6500	8800	7800



In which quarter did the learner get the highest marks for English?

In which quarter did the learner get the highest marks for geography?

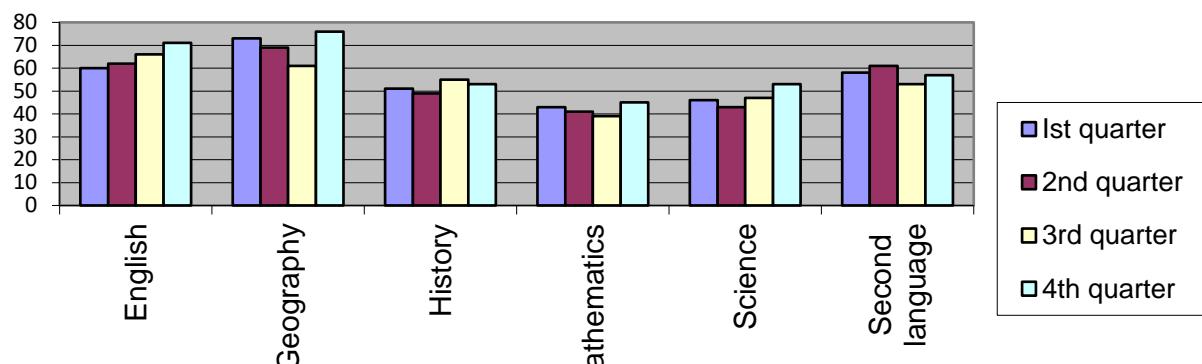
In which quarter did the learner get the lowest marks for Mathematics?

In which quarter did the learner get the lowest marks for Science?

In which quarter did the learner get the highest average?

School subjects:

	1st quarter	2nd quarter	3rd quarter	4th quarter
subject				
English	60	62	66	71
Geography	73	69	61	76
History	51	49	55	53
Mathematics	43	41	39	45
Science	46	43	47	53
Second language	58	61	53	57



Refer to the HIV AIDS handout and do the following:

1. Refer to table 2 in this article and draw up a column chart to compare HIV prevalence per province. If possible, do this on a computer or graph paper.
 2. Refer to table 1 in this article and draw up a pie chart to compare HIV prevalence between male and female. The total number of people in South Africa who are infected with HIV is 8 428 000, of which 3 772 00 are male and 4 656 000 are female.
 3. The article makes the following statement regarding the age of people infected with HIV: Age: "The highest prevalence rate was among the 25-29 age group (28%), followed by the 30-34 group (24%). " If we assume, based on these statistics, that in your organisation 28% of workers in the age group 25 to 29 are infected with HIV and 24% of workers in the age group 30 to 34 are infected, how would this affect your organisation in terms of absenteeism and productivity?

Create a stemplot for the average daily temperatures for July

July 1	July 2	July 3	July 4	July 5	July 6	July 7
22	23	21	22	20	21	21
July 8	July 9	July 10	July 11	July 12	July 13	July 14
14	13	11	9	9	8	12
July 15	July 16	July 17	July 18	July 19	July 20	July 21
17	18	17	19	18	17	19
July 22	July 23	July 24	July 25	July 26	July 27	July 28
21	22	24	16	15	16	14
July 29	July 30	July 31				
12	11	17				

What does the stemplot tell you about the average temperature in July?

What is the range of the dataset?

--

What does this mean in terms of the stemplot?

What is the mean of the dataset?

What is the mode of the dataset?

What is the median of the dataset?

Which method would most accurately describe the temperatures in July?

Calculate the minimum, maximum and median of the stemplot dataset.

Calculate the lower quartile (Q1) and the upper quartile (Q3),

Show the dataset as Q0, Q1, Q2, Q3, and Q4

What do the quartiles tell you about the temperatures in July?

Use the table below and draw a graph to compare truck hijackings from 2001 to 2007 for Gauteng Province. Also discuss what conclusions can be drawn from these statistics.

Information Management - South African Police Service

Truck hijacking (subcategory of aggravated robbery) in the RSA for the period April to September 2001 to 2007

Province (Boundaries as on October 2007)	Reported crime figures						
	2001	2002	2003	2004	2005	2006	2007
Eastern Cape	87	90	41	18	24	12	13
Free State	53	11	31	46	34	18	27
Gauteng	1,062	203	237	218	214	217	357
KwaZulu-Natal	370	72	62	74	49	39	57
Limpopo	52	11	6	20	3	8	7
Mpumalanga	124	80	50	29	49	51	72
North West	57	31	18	41	46	38	49
Northern Cape	0	0	2	0	0	2	2
Western Cape	90	38	10	11	5	5	14
RSA Total	1,895	536	457	457	424	390	598