

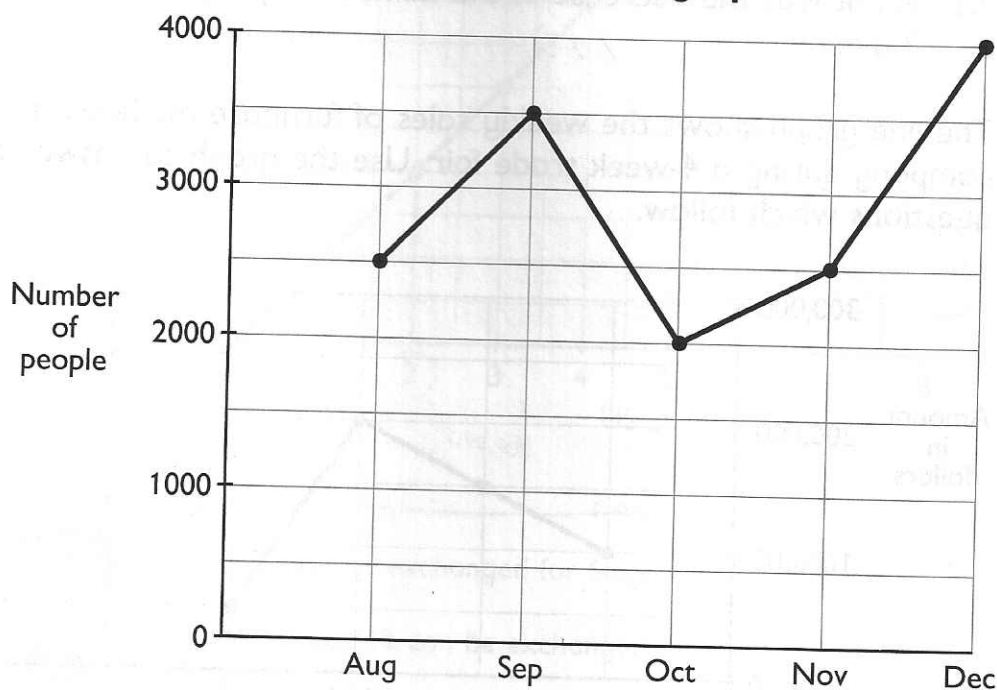
5 Graphs

1 Line Graphs

This table shows the attendance at a swimming pool for 5 months.

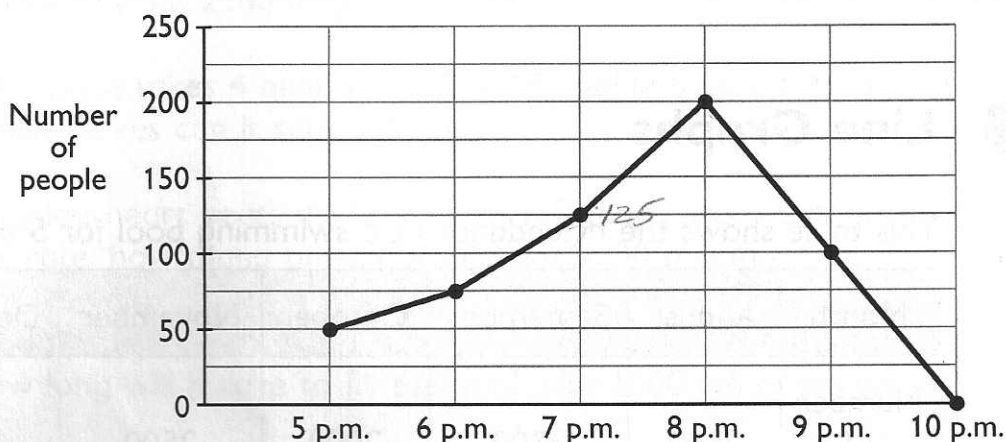
Month	August	September	October	November	December
Number of people	2500	3500	2000	2500	4000

The data can also be presented in a **line graph**.



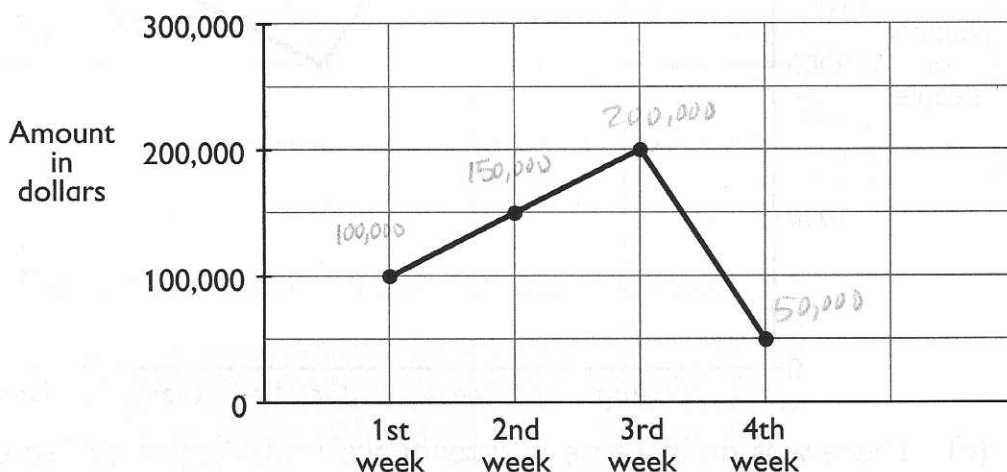
- (a) There was an increase in attendance from August to September. What was the increase? 1000
- (b) There was a decrease in attendance from September to October. What was the decrease? 1500
- (c) What was the difference between the attendance in September and the attendance in December? 500

1. The line graph shows the number of people in a supermarket by the hour from 5 p.m. to 10 p.m. Use the graph to answer the questions which follow.



- (a) What was the increase in the number of people from 7 p.m. to 8 p.m.?
 (b) What was the decrease in the number of people from 8 p.m. to 9 p.m.?

2. The line graph shows the weekly sales of furniture made by a company during a 4-week trade fair. Use the graph to answer the questions which follow.



- (a) The weekly sales decreased from \$200,000 in the 3rd week to \$50,000 in the 4th week. What was the decrease?
 (b) What was the average weekly sales?

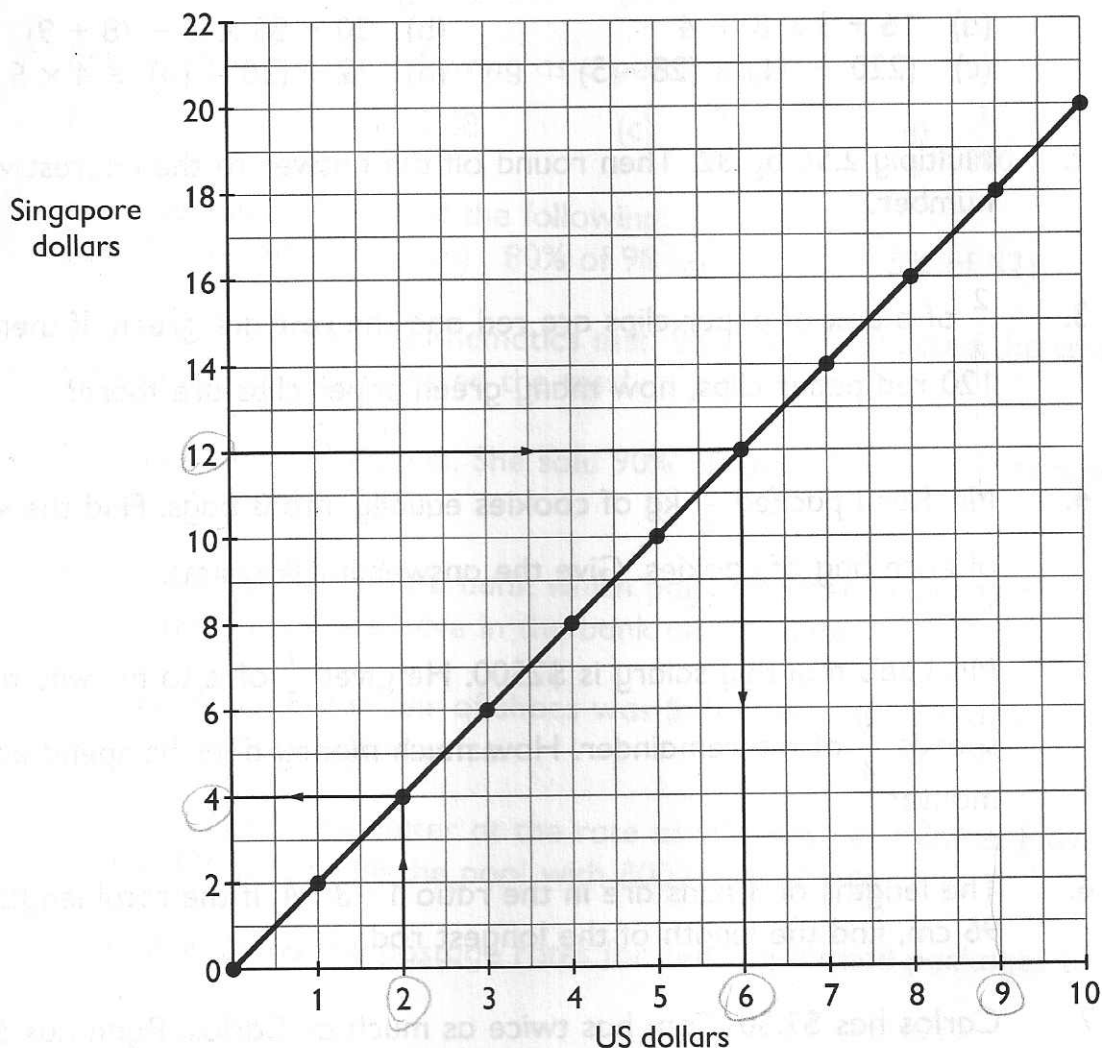
(in 1000's)

100
150
200
50
500

$$500 \div 4 = \$125,000$$

sum 52 (count)

3. This line graph shows the exchange rate between US dollars and Singapore dollars some years ago.



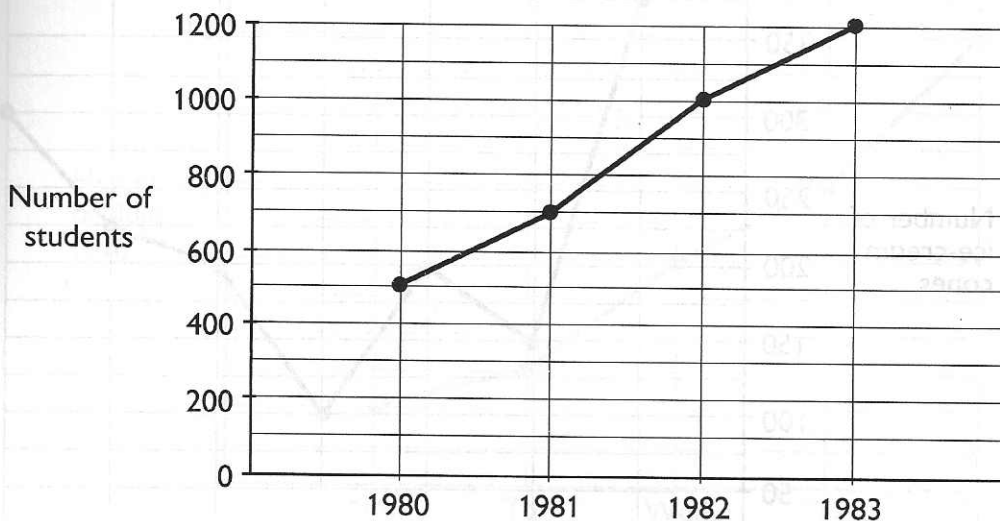
US\$2 can be exchanged for Singapore \$4.

Singapore \$12 can be exchanged for US\$6.

- (a) How many Singapore dollars can be exchanged for US\$9? *\$18*
 (b) How many US dollars can be exchanged for Singapore \$10? *\$5*
 (c) How many US dollars can be exchanged for Singapore \$16? *\$8*

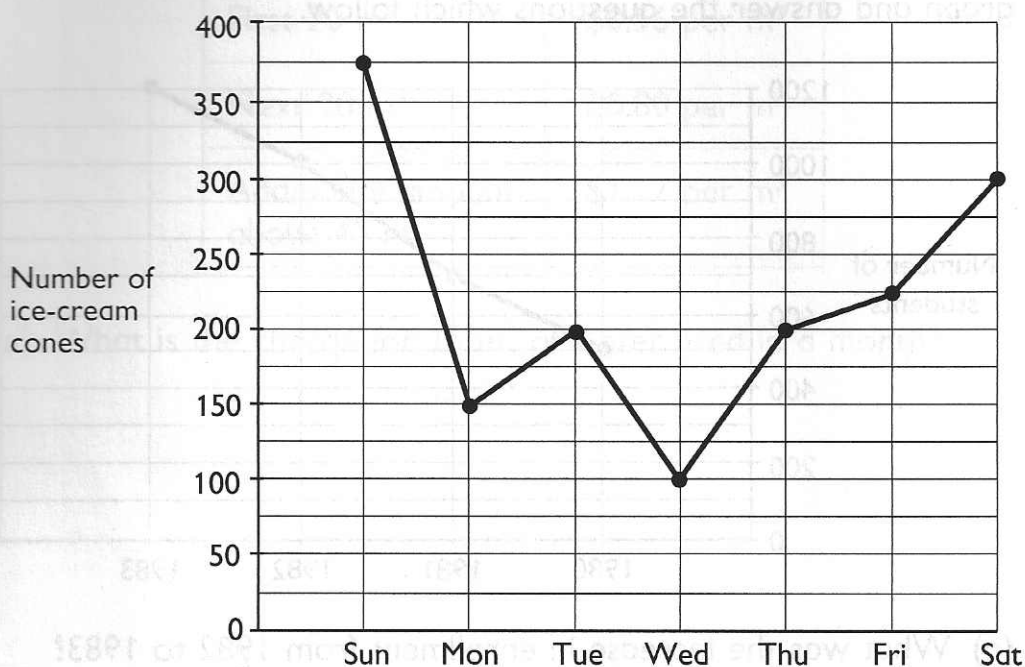
EXERCISE 36

The line graph shows the enrollment of a school for 4 years. Study the graph and answer the questions which follow.



- What was the increase in enrollment from 1982 to 1983?
- When did the enrollment increase by 300 students in one year?
- What was the difference between the enrollment in 1980 and the enrollment in 1983?
- What was the total enrollment in the 4 years?
- What was the average enrollment per year?

2. The line graph shows the daily sales of ice-cream cones by a shop over 1 week. Study the graph and answer the questions which follow.



(a) On which day was the sales the lowest?

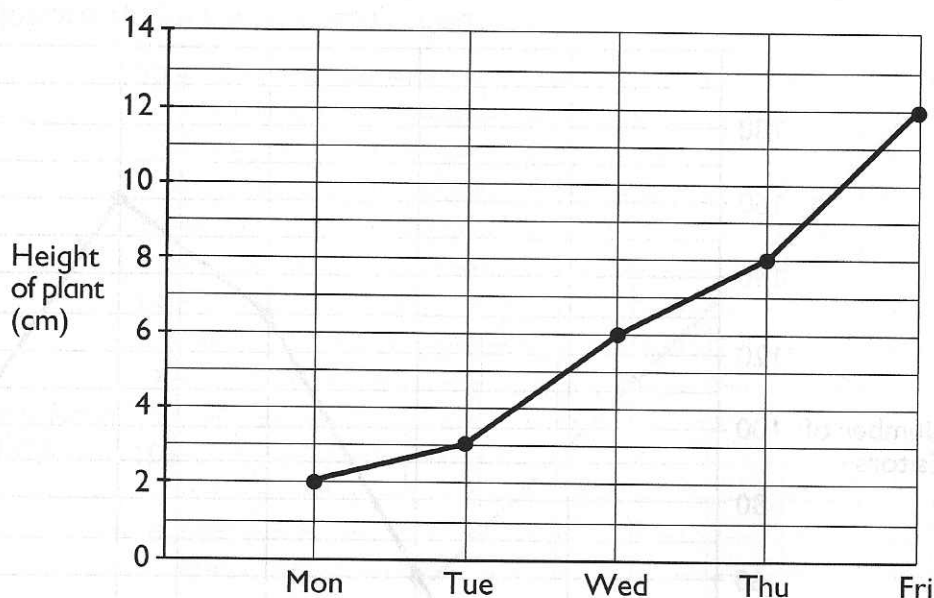
(b) What was the sales on Sunday?

(c) On which day were 300 ice-cream cones sold?

(d) What was the increase in the sales from Friday to Saturday?

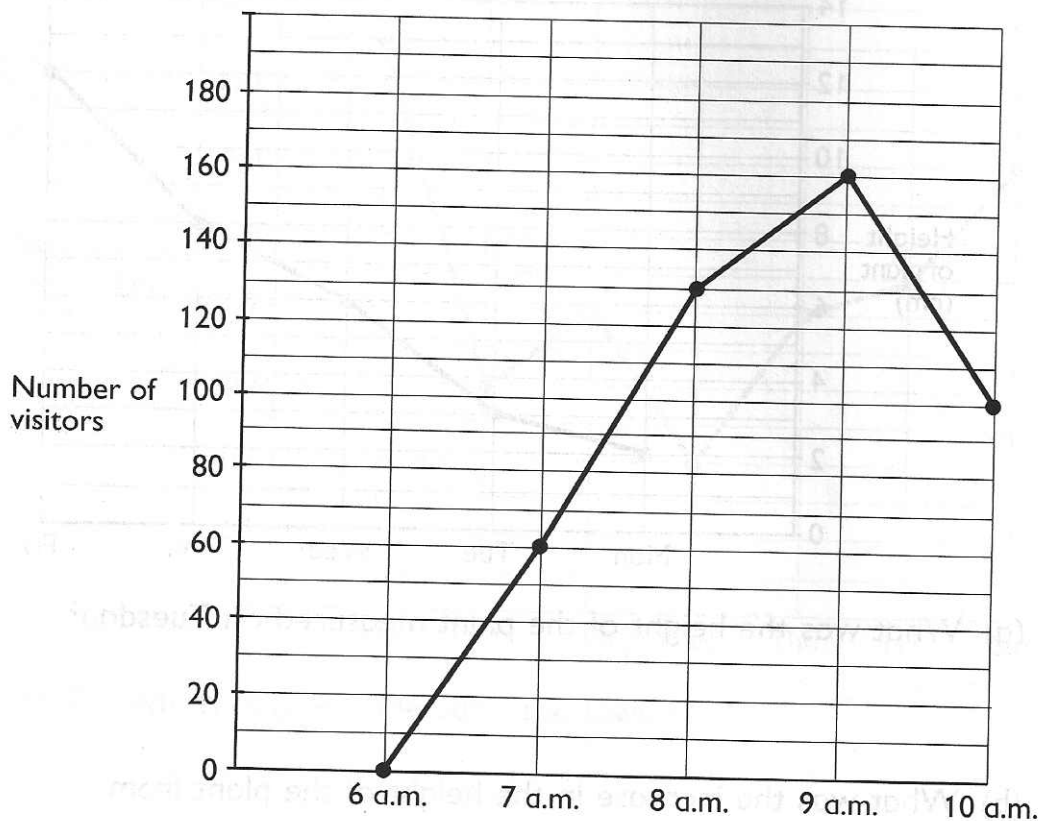
(e) When did the sales decrease by 100 in 1 day?

3. The line graph shows the height of a plant measured at 8 a.m. every day for 5 days. Study the graph and answer the questions which follow.



- (a) What was the height of the plant measured on Tuesday?
- (b) What was the increase in the height of the plant from Thursday to Friday?
- (c) When did the plant grow by 3 cm in 1 day?
- (d) When did the plant grow the fastest in 1 day?
What was the increase in height?
- (e) How many days did the plant take to grow from 2 cm to 12 cm?

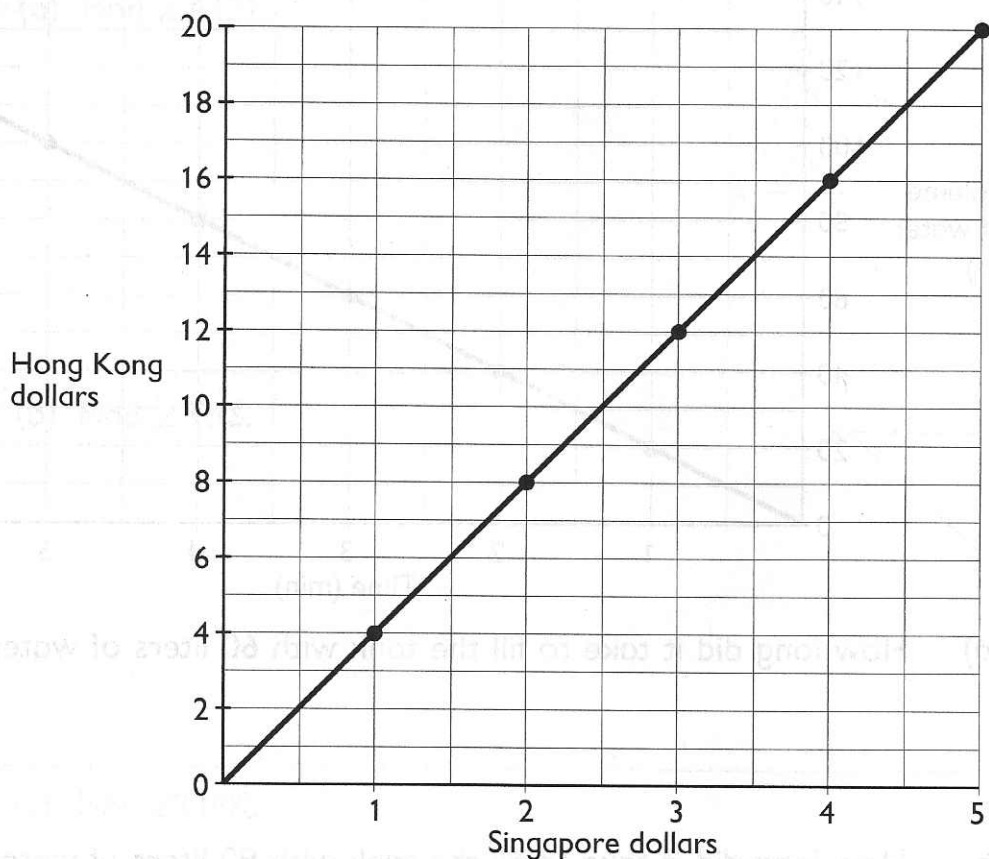
4. The line graph shows the number of visitors in a park between 6:00 a.m. and 10:00 a.m. on a Sunday morning. Study the graph and answer the questions which follow.



- (a) At what time were there 60 visitors in the park?
- (b) How many visitors were there in the park at 8:00 a.m.?
- (c) When did the number of visitors increase by 30 in 1 hour?
- (d) When did the number of visitors increase the most in 1 hour?
- (e) When did the number of visitors decrease by 60 in 1 hour?

EXERCISE 37

1. This graph shows the exchange rate between Hong Kong dollars and Singapore dollars in a certain year.



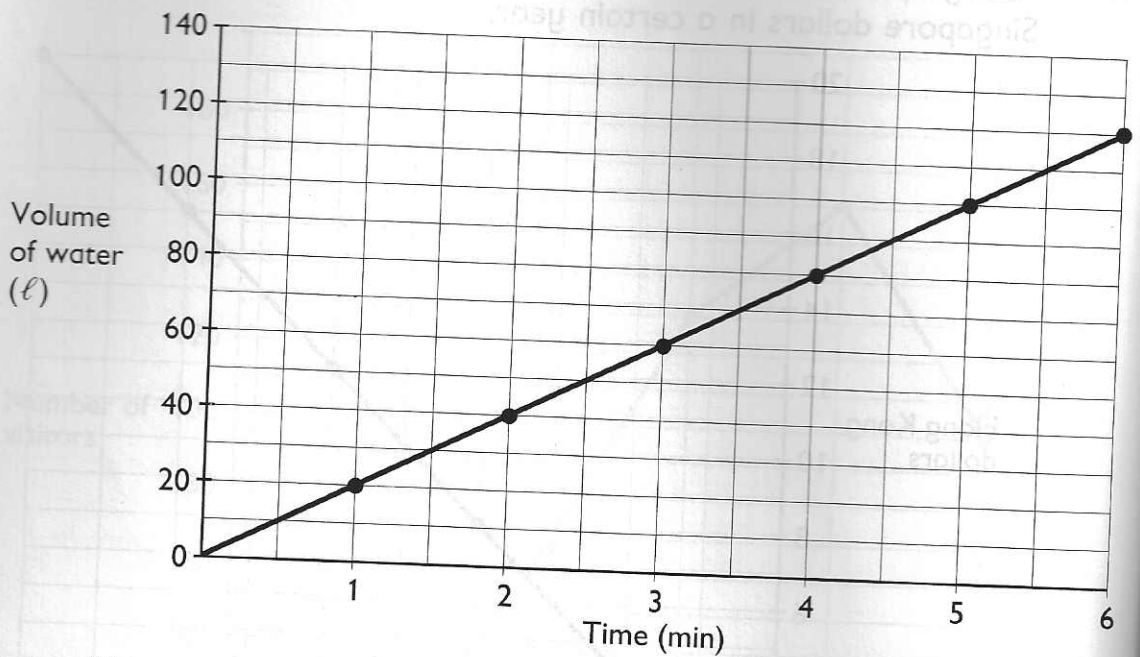
Study the graph and complete the following:

(a)	Singapore dollars	1	2		4	
	Hong Kong dollars			12		20

(b) Hong Kong \$10 could be exchanged for Singapore \$_____.

(c) Singapore \$4.50 could be exchanged for Hong Kong \$_____.

2. A tap was turned on for 6 minutes to fill a tank with water. The line graph shows the volume of water in the tank at the end of each minute. Study the graph and answer the questions which follow.



- (a) How long did it take to fill the tank with 60 liters of water?
- (b) How long did it take to fill the tank with 90 liters of water?
- (c) How much water was in the tank at the end of 2 minutes?
- (d) How much water was in the tank at the end of $3\frac{1}{2}$ minutes?