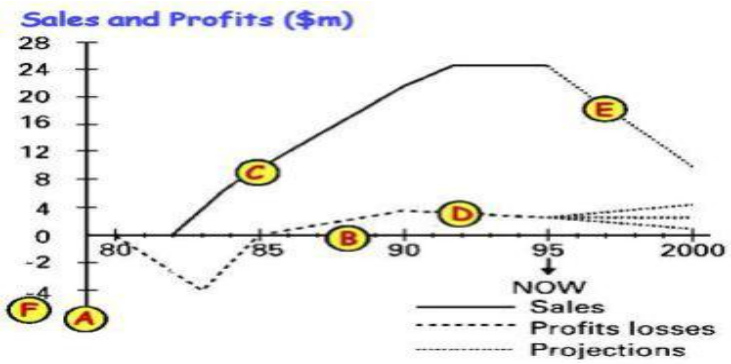
Set of exercises about English expressions frequently used in the description of graphs and charts

Look at the graph and write the appropriate letters in front of each definition:

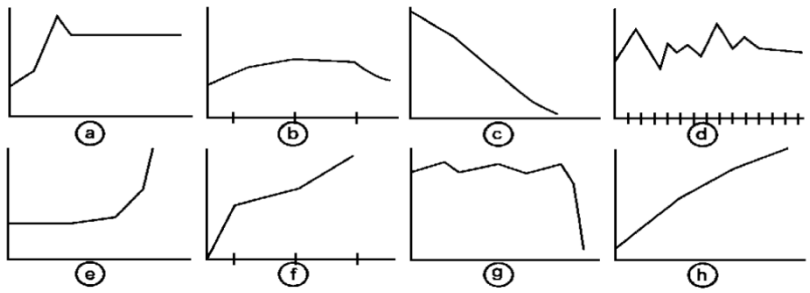


□ : the horizontal axis (or the x axis) □ : a solid line

□ : the vertical axis (or the y axis) □ : a broken line

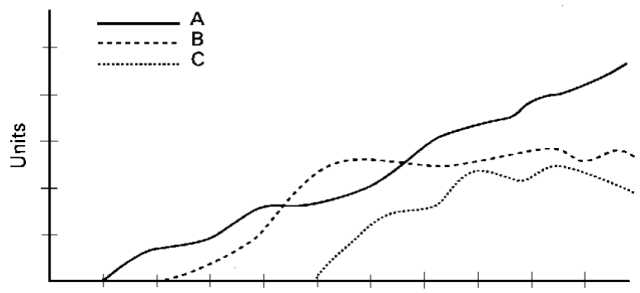
□ : the scale □ : a dotted line

Match each sentence below with one of the following graphs



1. □ The investment level rose suddenly.
2. □ The sales of our products fell slightly in the final quarter.
3. □ The Research and Development budget has stabilized over the past few years.
4. □ At the end of the first year, sales stood at 50 per cent of the present level.
5. □ The price reached a peak before falling a little and then maintaining the same level.
6. □ There has been a steady increase in costs over several years.
7. □ The sudden collapse in share prices has surprised everyone.
8. □ The value of the shares has shown a steady decline.

Look at the graph below, then complete the sentences.



1. The ..... compares three products : A, B and C.

2. The ..... shows time over ten years while the ..... shows sales in number of units.

3. As you can see, product A is represented by the .....

4. The performance of Product B is shown by the .....

5. And a …… has been used to show the results of Product C.

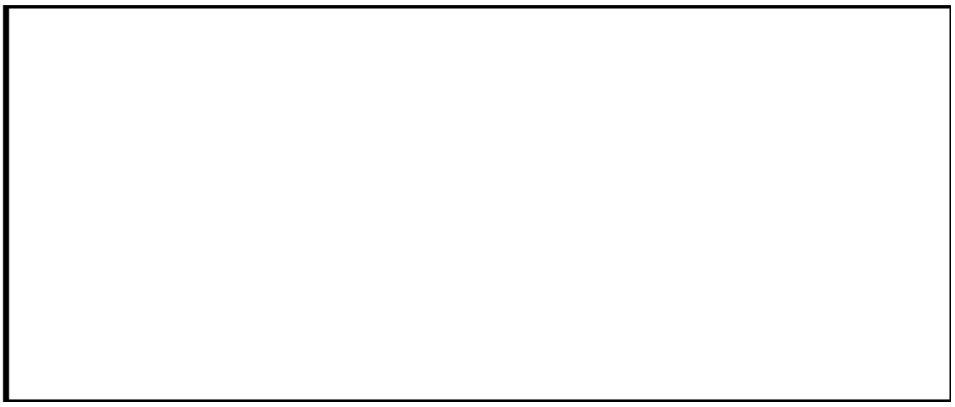
6. Clearly, ... is the most successful product .....

7. Sales of Product B ..... in recent years while sales of Product C .....

8. On the contrary, product A has shown a .....

Read the following text and draw the corresponding graph on the right.

The graph opposite covers the years 1976 to 1995. It shows that the number of television viewing hours rose steadily and steeply during that period in the US, starting at just under 5 hours a day to reach more than 7 hours in 1995. There was a slight increase in 1982 and sharper falls in 1986 and 1991. The next decrease, in 1994, is hardly (scarcely) significant. Though we do not have the latest figures, it is unlikely that the trend will have reversed.



Choose the correct words in italics to complete the report.

Sales began the year at 30,000 units in January and increased **slight / slightly** to 32,000 units in February.

There was **a sharp / sharply** rise **to / by** 38,000 in March **due / led to** the inroduction of a new price discounting scheme. This was followed by **a slight / slightly** fall in April when sales dropped to 36,000 units.

Our competitors launched a rival product in the spring and this resulted **in / from a dramatic / dramatically** fall to 25,000 in May. But we ran a summer advertising campaign and sales increased **steady / steadily to / by** 2,000 units a month throughout June, July and August until they stood **in / at** 33,000 in September.

The **dramatic / dramatically** rise to 45,000 in October resulted **in / from** the launch of our new autumn range. But then we experienced problems meeting demand and sales fell **sharp / sharply** in November and remained **steady / steadily at / by** 39,000 in December.

Complete the tables with suitable words.

VERB	NOUN
to rise	
	a fall
	an increase
to decrease	
to improve	
	a recovery

ADJECTIVE	ADVERB
slight	
	sharply
dramatic	
steady	

To discover the meaning of specific verbs describing trends, complete the sentence with the appropriate expression from the right-hand column.

1. To plunge means to fall	a. continuously between one level and another.
2. To level off means to stop	b. extremely quickly.
3. To fluctuate means to change	c. suddenly and often a long way down.
4. To slide means to go	d. quickly and without control.
5. To stagnate means to stay	e. increasing or decreasing.
6. To rocket means to rise	f. the same and not grow or develop.
7. To jump means to increase	g. suddenly by a large amount.
8. To tumble means to fall	h. suddenly and strongly.
9. To surge means to increase	i. quickly to a high level.
10. To soar means to rise	j. into a worse state due to lack of control or care.

Key: 1c, 2e, 3a, 4j, 5f, 6b, 7g, 8d, 9h, 10i

As you might have noticed in the previous exercise, verbs describing trends are often accompanied by a variety of adverbs indicating the degree or the speed of change.Some of the adverbs indicating the degree of change is: considerably, dramatically, hugely, a little, a lot, moderately, significantly, slightly, substantially, vastly, etc. Some of the adverbs indicating the speed of change are: abruptly, gently, gradually, quickly, quietly, rapidly, sharply, slowly, suddenly, steadily, steeply, swiftly, etc.

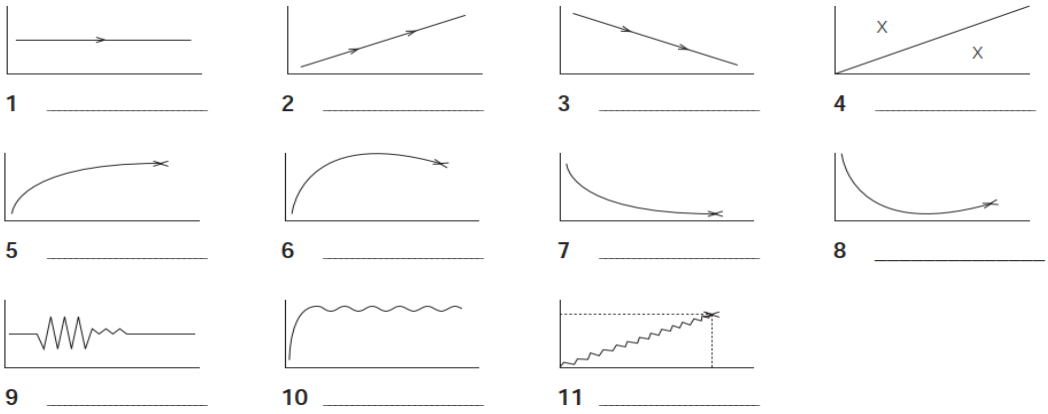
Underline the correct word in order to complete the following sentences.

1. The annual growth rate has been rising *steadily/stable* in the past few years.
2. Last year domestic sales grew *critically/significantly*.
3. The company's shares rose *quickly/fastly* and stayed well above their initial offering price.
4. The need for natural gas has soared *rapidly/fastly* since the flood.
5. GDP jumped *considerately/considerably* in the country between April and July.
6. The unemployment rate lifted *slightly/slight* to almost 5% in the past year.
7. Life expectancy of these people decreased *rarely/rapidly* due to the working conditions.
8. The number of new email accounts is declining *vastly/gradually* because of socialnetworks.
9. The singer's popularity ratings soared *quietly/suddenly* after she appeared in the chatshow.
10. Gold prices are fluctuating *steeply/a lot* at the moment.

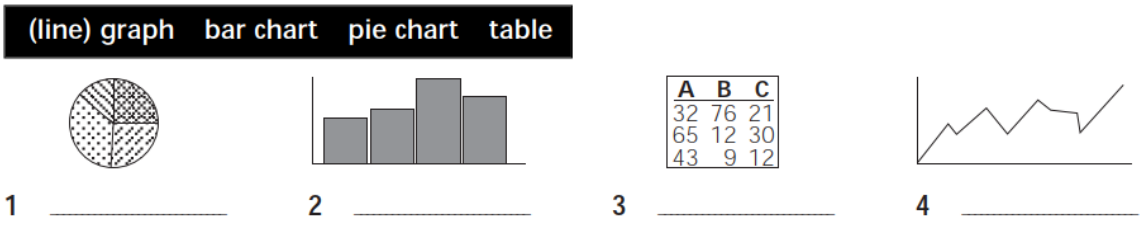
Key: 1. steadily, 2. significantly, 3. quickly, 4. rapidly, 5. considerably, 6. slightly, 7. rapidly, 8. gradually, 9. suddenly, 10. a lot

Label these graphs with words from the box:

to increase to fall to stay the same to be above/below to reach a peak to hit a low
to drop back to recover to stand at to remain high to fluctuate and then to level off



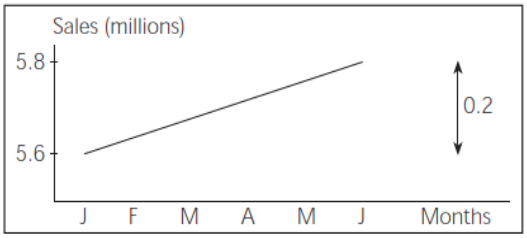
Label these charts with words from the box.



Choose the correct words to complete this presentation extract.

I'd like you to look at the (5) graph/graphic, which shows our sales in the first (6) half/quarter of this year. The vertical axis represents sales in millions of (7) unities/units.

As you can see from the graph, sales rose from 5.6m in January (8) until/to a (9) figure/number of 5.8m in June. In other words, sales rose (10) with/by 0.2m.



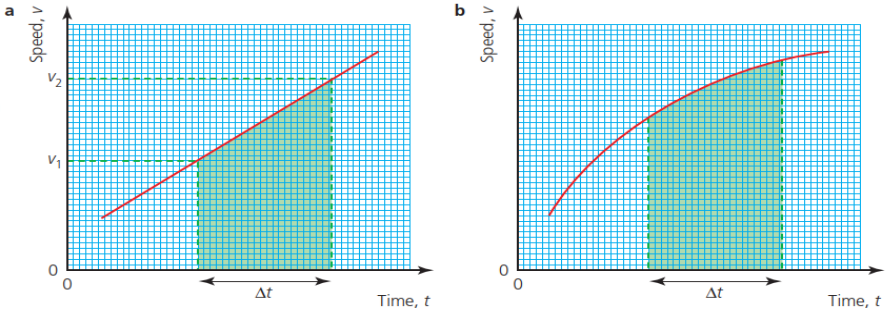
Choose the correct preposition.

a Sales increased by/of/in 3%. (after a verb)
b There was an increase in sales by/of/in 3%. (after a noun and before an amount)
c There was a 3% increase by/of/in sales. (after a noun and before the topic)

Areas under graphs

The area under many graphs has a physical meaning. As an example, consider **Figure a,** which shows part of a speed – time graph for a vehicle moving with constant acceleration. The area under the graph (the shaded area) can be calculated from the average speed, given by (v1 + v2)/2 , multiplied by the time, Δt. The area under the graph is therefore equal to the distance travelled in time Δt.
In Figure b a vehicle is moving with a changing (decreasing) acceleration, so that the graph is curved, but the same rule applies – the area under the graph (shaded) represents the distance travelled in time Δt.

The area in Figure b can be estimated in a number of different ways, for example by counting small squares, or by drawing a rectangle that appears (as judged by eye) to have the same area. (If the equation of the line is known, it can be calculated using the process of integration.)



All linear graphs can be represented by an equation of the form:y = mx + c
where m is the gradient and c is the value of y when x = 0, known as the y-intercept