4. Graphs

Interpreting and drawing financial graphs

Graphs are a great way to visualise data. They are used in the news, in books we read and the workplace to bring numbers to life and make it easier to interpret data. In this worksheet, you will practise reading from and interpreting graphs.

Task one: Interpreting and drawing straight line graphs

Using the currency conversion graphs on page 5, answer the following questions:

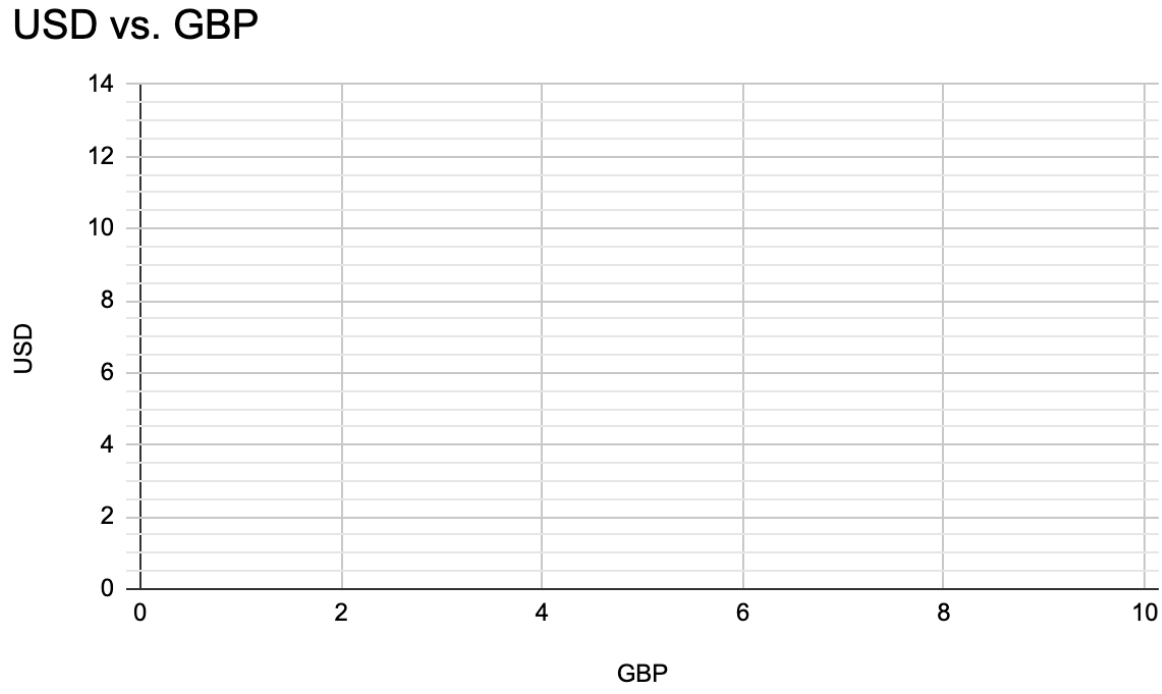
The value of currency is constantly fluctuating due to supply and demand for that particular currency. As a result, if you go to a cash machine on holiday to withdraw cash on one day you may notice that the same amount of cash costs you a slightly different amount to the next day.

1. What is £5 (GBP) worth in euros (EUR)?

2. How much would it cost you in GBP if you spent €12 on lunch by the pool on holiday and incurred a £1 fee from your bank for paying by card abroad?

3. During your gap year you work in an American summer camp. After paying for flights, you save $500 (USD) to visit South Korea. How much would your savings be worth when you convert them to South Korean won (KRW)?

4. Assume that the value of £1 in USD is $1.45. Please draw the graph to show this currency conversion rate.



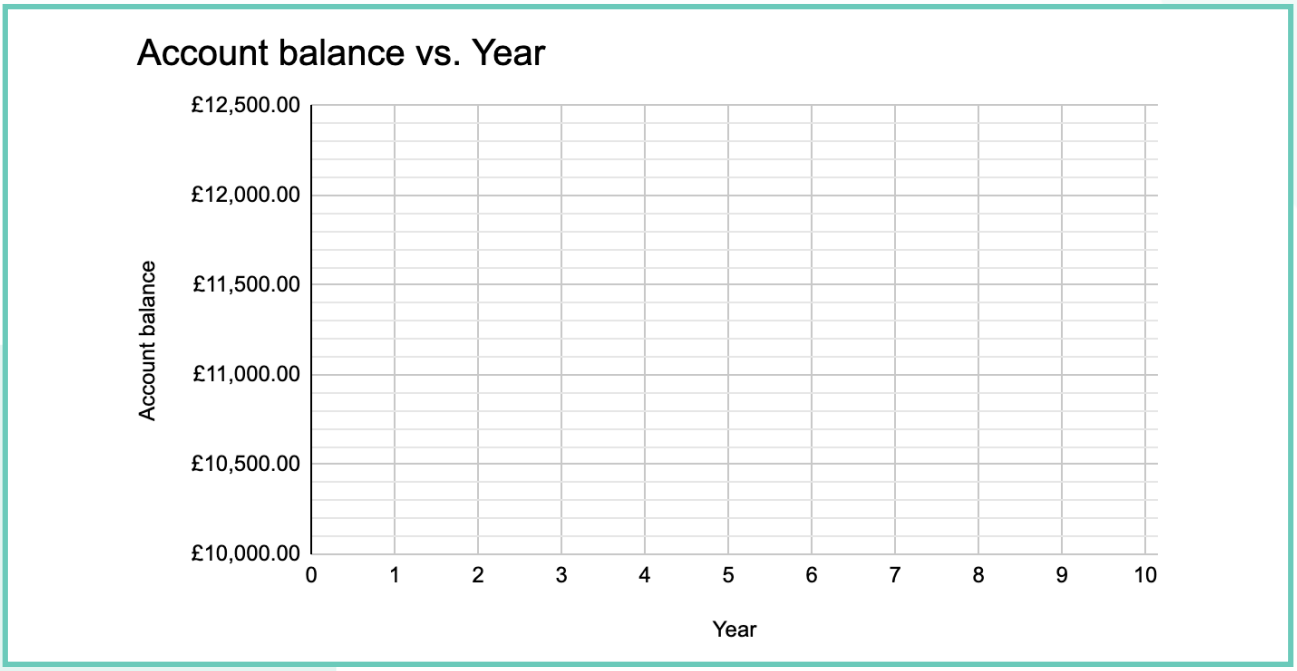
Task two: Working with exponential graphs [Higher]

A savings account offers 2% compound interest each year. This means that interest is calculated each year on the total amount in the account, including both the initial deposit and any interest accumulated to date.

1. Complete the below table by calculating the account balance at the end of each year.

Year	Account balance
0	£10,000.00
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

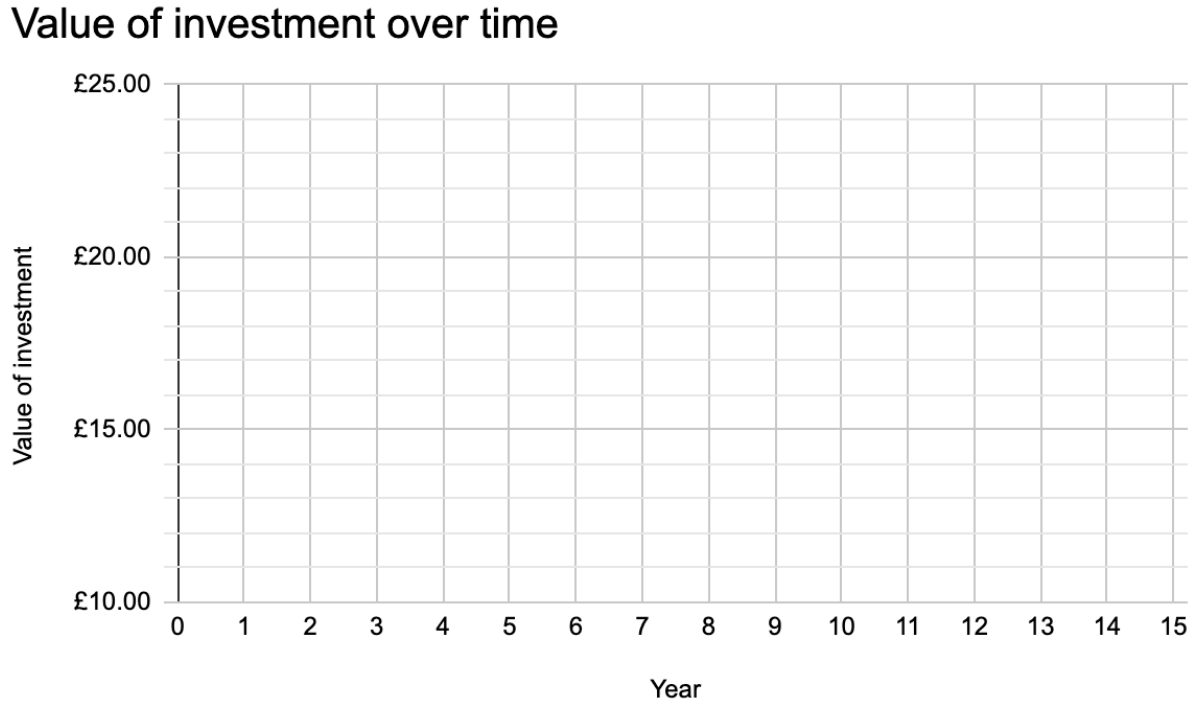
2. Draw a line graph to show how these savings grow over time.



An investment opportunity provides a 6% annual return. This is depicted by the following equation where P is the initial amount invested and y is the value of the investment over x years:

$$y = P(1.06)^x$$

3. Sketch the graph of this equation for the first 15 years of this investment. Assume an initial investment of £10.



4. If you initially invested £1,500 and added a further £1,000 two years later, how much would you expect your total investment to be worth after seven years?

Currency conversion graphs