

# FRACTIONS, DECIMALS AND PERCENTAGES



## MEET LAUREN

Technical Graduate Apprentice, Leidos

### SUBJECTS STUDIED AT SCHOOL

Maths ● English ● Computing Science  
Business Management ● Foundation Apprenticeship in IT: Software Development

### FURTHER EDUCATION:

Currently studying a Graduate Apprenticeship in IT: Software Development at the University of Strathclyde

## CAREER JOURNEY SO FAR

I started off at Leidos as a Career Ready mentee for four weeks.

Completed Foundation Apprenticeship work experience at Leidos.

Really enjoyed work experiences at Leidos, so applied for the Graduate Apprenticeship and got the spot.

## FUTURE ASPIRATIONS



To pass my Graduate Apprenticeship and become a senior software developer or engineer at Leidos.

## Q&A WITH LAUREN

### What does your company/organisation do?

Leidos (previously Lockheed Martin) is an American defence, aviation, information technology and biomedical research company that provides scientific, engineering, systems integration, and technical services. In Leidos UK, we do a large amount of work for the UK and Scottish Government.

### What types of activities do you do in your job?

My job involves me working in project teams to help create technical solutions for customers. When creating these solutions, I work closely with my team's as we all help each other and with the customer to obtain any requirements or feedback from them.

I also work on support to fix any issues that have been raised by the customer or users of systems.

As well as being a Technical Graduate Apprentice at Leidos, I am also a student at the University of Strathclyde, where I study BSc Hons IT: Software Development.

### What does a typical day at work look like for you?

My typical day usually starts out with me getting into the office, where I will say hello to everyone. Once I am sat down, I will check my emails to see if anything pops up. I look at an online task/Kanban board to see what task(s) I am assigned to. I usually start working on my tasks but I usually have other meetings throughout the day, which I will attend. One of my daily meetings is a daily stand-up; this is a meeting that me and my team have everyday to ask questions and discuss our progress to the customer. When I have some free time during the day, I get to play snooker with my work colleagues! Since I am an apprentice, I have Fridays off as my University day, where I will study on campus or at my home.

### What are your favourite things about your job?

I enjoy the problem-solving aspect of my job; I love a good challenge that gets me thinking. I also enjoy collaborating with others to exchange skills and work together to solve problems.

## HOW LAUREN USES FRACTIONS, DECIMALS AND PERCENTAGES AT WORK



In Leidos, fractions are used within our code – especially decimal fractions. Here is an example piece of code, where fractions are used (**Note:** this has been altered for confidentiality reasons):

```
double totalCost = 5000.00;
double rate = 5.5;
double fundingAmount = totalCost * (rate / 100);
Console.WriteLine(fundingAmount);
```

As you can see, the fraction  $\frac{5.5}{100}$  is used in a Leidos system to find a funding rate amount. If you visit the .Net Fiddle website (<https://dotnetfiddle.net/>), you can enter this code within the main method and press 'Run', which will display the funding rate amount.

## ACTIVITIES

In the below examples, what will the value of fundingAmount be? Turn this into a fraction, then a decimal number that should be rounded to two decimal places.

**Notes:** double in C# is a decimal number. In C#, (a / b) is also  $\frac{a}{b}$ . In C#, a \* b is also a x

1. `double fundingAmount = (1.0 / 2.0) + (1.0 / 6.0);`

2. `double fundingAmount = (4.0 / 5.0) * (2.0 / 4.0);`

3. `double fundingAmount = (4 * (4.0 / 8.0)) * (2 - (3.0 / 12.0));`  
Hint:  $(4 * (4.0 / 8.0))$  is also  $\frac{4}{1} \times \frac{4}{8}$

## Solutions

### Problem 1

0.67

### Problem 2

0.4

### Problem 3

3.5