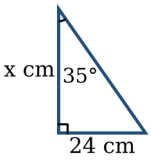
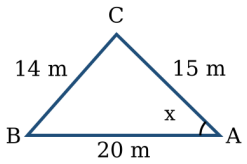
Day 133	A Tier 10-a-day
1 Write these numbers in order of size, starting with the smallest. 30% $\frac{4}{20}$ 0.94 0.87	
2 Work out the value of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately.  	
3 (a) Factorise $x^2 - 64$ (b) Use the same idea to work out $43^2 - 7^2$ without a calculator.	
4 $\mathbf{a} = \begin{pmatrix}1\\2\end{pmatrix}$ and $\mathbf{b} = \begin{pmatrix}1\\0\end{pmatrix}$. Work out $3\mathbf{a} + 2\mathbf{b}$.	
5 A new car is worth £15000. (Calculator) Its value falls by 15% each year. Work out its value after 3 years.	

Day 133	A Tier 10-a-day
6 The number of followers of a channel is increased by 15% and then the new amount is decreased by 30%. Work out the overall percentage decrease.	
7 Ben and Leah each invest £2000 for 3 years. (Calculator) Ben's account pays 6% simple interest per year. Leah's account pays 6% compound interest per year. Work out how much more interest Leah earns than Ben.	
8 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
9 Work out $(3\frac{1}{4} + 2\frac{2}{3}) \times 1\frac{1}{2}$ Give your answer as a mixed number in its simplest form.	
10 Make x the subject of $y = \frac{2x - 2}{3x + 6}$	