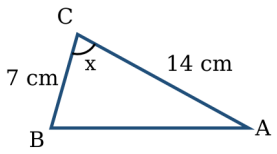
Day 281	A Tier 10-a-day
1 Solve $-2x - 8 \leq 2x - 6$	
2 Sara is paid £14.50 per hour for a basic week of 40 hours. (Calculator) Overtime is paid at time and a half. Last week Sara worked 4 hours of overtime. Work out Sara's total pay for the week.	
3 A jug holds 12500 cm^3 of water. Write this volume in litres.	
4 Oscar spends $\frac{1}{4}$ of the money on a book and $\frac{1}{2}$ of the money that is left on a game. Oscar has £45 left. How much money did Oscar have to begin with?	
5 p : q = 8 : 1 q : r = 2 : 7 (a) Work out the ratio p : q : r (b) p, q and r add up to 100. Work out the value of r.	

Day 281 **A Tier 10-a-day**

6 The area of triangle ABC is 47.7 cm^2.
(Calculator)
Angle x is acute.
Work out the size of angle x. Give your answer to 1 decimal place.
The diagram is not drawn accurately.



7 A phone costs £144 including VAT at 20%.
Work out the price of the phone before VAT was added.

8 A rectangle has width x cm and length (x + 8) cm.
The area of the rectangle is 153 cm^2.
(a) Show that $x^2 + 8x - 153 = 0$
(b) Work out the value of x.

9 The table shows information about 50 days.
(a) Work out the mean.
(b) Write down the mode.

Late arrivals	0	1	2	3	4
Frequency	15	5	2	12	16

10 A cyclist travels 270 metres in 16 seconds. The distance is correct to the nearest 10 metres and the time to the nearest 0.1 second.
(a) Work out the upper bound and the lower bound of the speed in m/s.
(b) Write the speed to a suitable degree of accuracy. Give a reason for your answer.