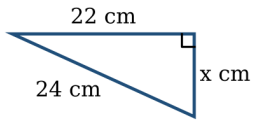
Day 132	A Tier 10-a-day
1 Work out the length of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately.  	
2 Ali buys a vintage radio for £40. He sells it for £26. Work out his percentage loss.	
3 Convert 0.5 m^3 into cm^3.	
4 A PIN has 4 digits. The first digit cannot be zero, but the other digits can be any of 0 to 9. (a) How many different PINs are possible? (b) Work out the probability of guessing a PIN in one attempt.	
5 Prove that the sum of three consecutive integers is always a multiple of 3.	

Day 132	A Tier 10-a-day
6 x = 73 is rounded to 2 significant figures. Write down the error interval for x.	
7 A sphere has radius 2 cm. Work out the volume of the sphere. Give your answer in terms of π.	
8 The price of a games console is decreased by 40%. The new price is then decreased by 25%. Work out the overall percentage change.	
9 Rationalise the denominator of $\frac{14}{4+\sqrt{2}}$ Give your answer in the form $a + b\sqrt{c}$ where a and b are integers.	
10 The graph of y = f(x) has a minimum point at (1, 3). Write down the coordinates of the turning point of the graph of (a) y = 2f(x) (b) y = f(x + 3)	