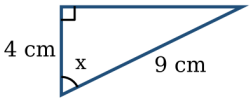
Day 347	A Tier 10-a-day
1 A bus travels at 7 m/s. Work out this speed in kilometres per hour.	
2 $f(x) = \frac{x - 5}{3}$ (a) Find $f^{-1}(x)$ (b) Work out $f^{-1}(-3)$	
3 The exchange rate is £1 = $1.25. (Calculator) Ben changes £700 into US dollars. How much does Ben get in US dollars?	
4 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
5 The population of a town is 5000. (Calculator) It increases by 10% each year. Work out the population after 2 years. Give your answer to the nearest whole number.	

Day 347	A Tier 10-a-day
6 Expand and simplify $(x + 2)^2 - (x - 6)(x - 2)$	
7 A bike costs £84 including VAT at 20%. (Calculator) Work out the price of the bike before VAT is added.	
8 y is directly proportional to the square root of x. When x = 36, y = 54. (a) Find a formula for y in terms of x. (b) Work out the positive value of x when y = 27.	
9 A water tank is a cylinder with radius 12 cm and height 8 cm. Work out the volume. Give your answer in terms of π.	
10 The value of a car falls by 20% each year. (Calculator) After 3 years it is worth £19,968. Work out its value at the start.	