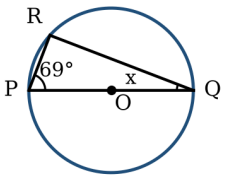
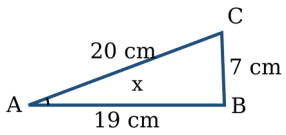
Day 31	A Tier 10-a-day
1 PQ is a diameter of the circle. Angle QPR = 69°. Work out the size of angle x. Give a reason for each step of your working.  	
2 Solve $\frac{2}{(x-2)} + \frac{6}{(x+1)} = 1$	
3 A train travels at 84 km/h for 2 hours 45 minutes. Work out the distance travelled.	
4 The number of visitors to a museum was 80 and is now 32. Work out the percentage decrease.	
5 A swimming pool holds 2.4 m^3 of water. How many litres is this?	

Day 31	A Tier 10-a-day
6 A sector has angle 72° at the centre and arc length 6π cm. Work out the radius of the sector.	
7 The price of a product increases by 50% each year for 2 years. Work out the overall percentage increase over the 2 years.	
8 $f(x) = -3x + 6$ $g(x) = x^2 + 3$ (a) Find g(2) (b) Find gf(x). Expand and simplify your answer.	
9 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
10 Ryan invests £18,500 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £22,385. Work out the annual rate of interest.	