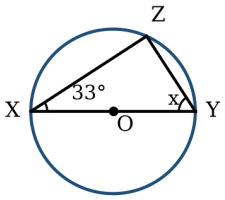
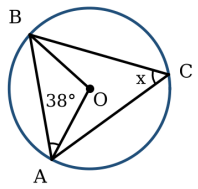
Day 273	A Tier 10-a-day
1 A lorry travels at 108 km/h. Work out this speed in metres per minute.	
2 XY is a diameter of the circle. Angle YXZ = 33°. Work out the size of angle x. Give a reason for each step of your working. 	
3 Chloe is paid £13.80 per hour for a basic week of 38 hours. (Calculator) Overtime is paid at time and a half. Last week Chloe worked 3 hours of overtime. Work out Chloe's total pay for the week.	
4 Triangle UVW: UV = 9 cm, VW = 5 cm, UW = 7 cm. Triangle STU: ST = 9 cm, TU = 5 cm, SU = 8 cm. Are the two triangles congruent? Give a reason for your answer.	
5 3 muffins and 3 coffees cost £30. 1 muffin and 2 coffees cost £12. Work out the cost of one coffee.	

Day 273	A Tier 10-a-day
6 Priya drives 60 km at 60 km/h and then a further 60 km at 30 km/h. Work out the average speed for the whole journey.	
7 A metal block has mass 360 g and volume 90 cm^3. The mass is measured to the nearest 10 grams and the volume to the nearest cm^3. (Calculator) Work out the lower bound for the density of the metal in g/cm^3. Give your answer correct to 3 significant figures.	
8 A, B and C are points on a circle with centre O. Angle OAB = 38°. (a) Work out angle AOB. (b) Work out the size of angle x. Give reasons for your answers. 	
9 Expand and simplify $(4 + \sqrt{3})(4 - \sqrt{3})$	
10 Make x the subject of $y = \frac{4x - 3}{x - 6}$	