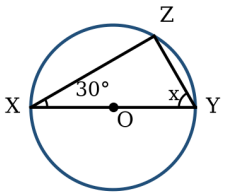
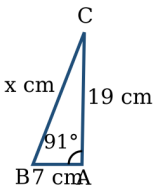
Day 221	A Tier 10-a-day
1 A shop sells coffee in 2 different sizes. Small bag: 400 g for £1.80 Large bag: 1000 g for £4.35 Which bag is the best value for money? You must show your working.	
2 Write these numbers in order of size, starting with the smallest. 10% 0.06 $\frac{6}{20}$ 24%	
3 XY is a diameter of the circle. Angle YXZ = 30°. Work out the size of angle x. Give a reason for each step of your working. 	
4 For two events A and B: P(A) = 0.55, P(B) = 0.6 and P(A or B) = 0.7. (a) Work out P(A and B). (b) Work out the probability that neither A nor B happens.	
5 Solve $5x^2 + 2x - 5 = 0$ Give your solutions correct to 2 decimal places. (Calculator)	

Day 221	A Tier 10-a-day
6 Expand and simplify $(5 - \sqrt{11})(6 - \sqrt{11})$ Give your answer in the form $a + b\sqrt{c}$	
7 A rectangle has length $(3x + 3)$ cm and width $(2x - 3)$ cm. The perimeter of the rectangle is 100 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	
8 The value of a car falls by 20% each year. (Calculator) After 2 years it is worth £1,920. Work out its value at the start.	
9 Work out the value of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately. 	
10 Solve $x^2 \geq 9$	