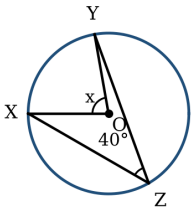
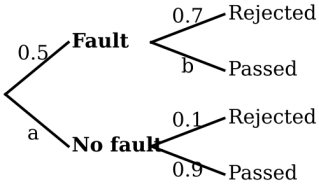
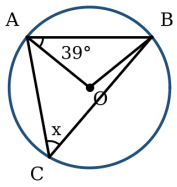
Day 121	A Tier 10-a-day
1 (a) A film starts at 6:40 am. The film lasts 1 hours 37 minutes. Work out the time it ends. (b) Change 150 minutes into hours. Give your answer as a decimal.	
2 The price of a games console changes from £50 to £48. Work out the percentage decrease.	
3 Solve $2x^2 + 9x + 6 = 0$ Give your solutions correct to 2 decimal places. (Calculator)	
4 X, Y and Z are points on a circle with centre O. Angle XZY = 40°. Work out the size of angle x. Give a reason for your answer. 	
5 The tree diagram shows probabilities for two events. (a) Work out the values of a and b. (b) Work out the probability that a part is rejected at the final check. 	

Day 121	A Tier 10-a-day
6 75% of a number is 75. (Calculator) Work out 50% of the same number.	
7 A, B and C are points on a circle with centre O. Angle OAB = 39°. (a) Work out angle AOB. (b) Work out the size of angle x. Give reasons for your answers. 	
8 Solve $x^2 - 10x + 7 = 0$ by completing the square. Give your answers in surd form.	
9 A is the point (3, 2) and B is the point (7, 6). Find the equation of the perpendicular bisector of AB.	
10 y is inversely proportional to x^2. When x = 8, y = 12. (a) Find a formula for y in terms of x. (b) Work out the positive value of x when y = 30.72.	