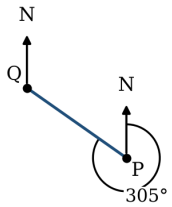
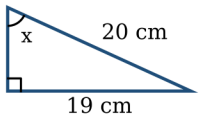
Day 176	A Tier 10-a-day
1 4 pens and 5 notebooks cost £84. 1 pen and 5 notebooks cost £51. Work out the cost of one notebook.	
2 The bearing of Q from P is 305°. Work out the bearing of P from Q. The diagram is not drawn accurately. 	
3 Here are the scores of 11 students in a test. 39 54 66 35 46 12 7 77 27 28 75 (a) Work out the median. (b) Work out the interquartile range.	
4 Isla buys a phone for £270 and sells it for £324. Work out Isla's percentage profit.	
5 The probability that Noah hits the target is 0.6. The probability that Ella hits the target is 0.7. The two events are independent. Work out the probability that neither Noah nor Ella will hit the target.	

Day 176	A Tier 10-a-day
6 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately.  	
7 Lena and Isla each invest £1000 for 2 years. (Calculator) Lena's account pays 2% simple interest per year. Isla's account pays 2% compound interest per year. Work out how much more interest Isla earns than Lena.	
8 A is the point $(-2, 3)$ and B is the point $(6, 1)$. Find the equation of the perpendicular bisector of AB.	
9 Expand and simplify $2\sqrt{10}(5 + 3\sqrt{10})$ Write your answer in the form $a + b\sqrt{c}$	
10 PA and PB are tangents to a circle with centre O. Angle APB = 98°. Work out the size of angle x (angle AOB). Give a reason for each step of your working. 