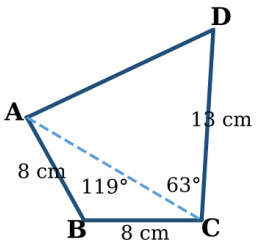
Day 154	IGCSE 10-a-day
1 $y = x^4 - 4x + 8$ Find $\frac{dy}{dx}$	
2 Triangle T has vertices A(2, 1), B(2, −11), C(8, 1). T is enlarged with scale factor $-\frac{3}{2}$ and centre (2, −3). (a) Write down the coordinates of the image of A. (b) The area of T is 24 square units. Work out the area of the image of T.	
3 $y = \frac{6x^5 - x^3 - 2x}{x^3}$ Find $\frac{dy}{dx}$.	
4 Rhys changes £800 into euros at £1 = €1.18. Rhys spends €190 and then changes the rest back into pounds at £1 = €1.25. How many pounds does Rhys get back?	
5 Lena read $\frac{7}{8}$ of a book on Saturday. On Sunday she read $\frac{3}{5}$ of the pages that were left. She still had 28 pages to read. How many pages are in the book?	

Day 154	IGCSE 10-a-day
6 Solve sin x = 0.4 for 0 ≤ x ≤ 360. Give your answers correct to 1 decimal place. (Calculator)	
7 The curve $y = x^3 + kx$ has a stationary point at $x = -2$. (a) Find the value of k. (b) Find the coordinates of the other stationary point.	
8 A rare car is worth £10,000. Its value increases by 3% each year. After how many whole years will it first be worth more than £17,500? (Calculator)	
9 In quadrilateral ABCD, AB = 8 cm, BC = 8 cm, CD = 13 cm, angle ABC = 119° and angle ACD = 63°. Work out the area of ABCD. Give your answer correct to 3 significant figures. (Calculator) 	
10 The line y = x + k is a tangent to the curve $y = 2x^2 + 2x + 5$. Find the value of k.	