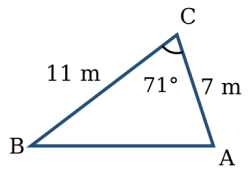
Day 284	A Tier 10-a-day
1 In a sale, all prices are reduced by 15%. A coat costs £34 in the sale. Work out the original price of the coat.	
2 Solve $-3(x - 7) = -4(x - 3) + 10$	
3 (a) A train leaves London at 8:55 am. The journey takes 2 hours 28 minutes. Work out the time it ends. (b) Change 2.25 hours into hours and minutes.	
4 Solve the simultaneous equations $6x - 4y = 14$ $-5x - 2y = -1$	
5 Solve $9^x = 81$	

Day 284 **A Tier 10-a-day**

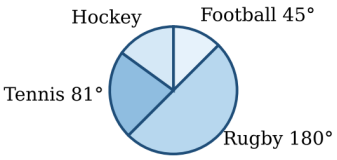
6 Work out the area of triangle ABC. (Calculator)
Give your answer to 3 significant figures.
The diagram is not drawn accurately.



7 Show that $\frac{\sqrt{8}+\sqrt{18}}{\sqrt{2}}$ is an integer, and find its value.

8 A sphere has radius 12 cm.
Work out the volume of the sphere. Give your answer in terms of π.

9 The pie chart shows how some students chose a sport.
20 students chose rugby.
(a) Work out the angle for hockey.
(b) How many students chose hockey?



10 Solve $\frac{2}{(x+5)} + \frac{3}{(x+1)} = 1$