Day 327	B Tier 10-a-day
1 A film starts at 6:45 pm. It lasts 3 hours 35 minutes. At what time does it finish? Give your answer using am or pm.	
2 Does the point $(-1, -4)$ lie on the line $y = 4x + 3$? You must show your working.	
3 (a) Change 3.7 m to cm. (b) Change 1630 m to km.	
4 The scale of a map is 1 : 100,000. Two towns are 12.5 cm apart on the map. Work out the real distance between the towns. Give your answer in kilometres.	
5 The bearing of M from L is 196°. Work out the bearing of L from M.	

Day 327 **B Tier 10-a-day**

6 Factorise $9 - y^2$

7 In triangle XYZ, XY = 14 m, YZ = 8 m and angle XYZ = 35°. (Calculator)
Work out the area of the triangle.
Give your answer correct to 1 decimal place.

8 A stratified sample of 40 students is taken from the 1000 students in the table.
Work out how many students should be sampled from Year 9.

Group	Students
Year 9	200
Year 10	300
Year 11	500

9 A cone has base radius 3 cm and vertical height 3 cm.

Volume of a cone = $\frac{1}{3}\pi r^2 h$

Work out the volume of the cone.
Give your answer in terms of π.

10 The cumulative frequency graph shows the times taken by 40 students to complete a puzzle.
(a) Use the graph to estimate the median.
(b) Work out an estimate for the interquartile range.

