Day 348	A Tier 10-a-day
1 Isla and Maya share 96 marbles in the ratio 1 : 7. How many more marbles does Maya get than Isla?	
2 Work out $4\frac{3}{4} \times 2\frac{4}{5}$ Give your answer as a mixed number in its simplest form.	
3 Two similar statues have volumes 40 cm^3 and 625 cm^3. The smaller one has height 4 cm. Work out the height of the larger one.	
4 Ryan buys a phone for £200 and sells it for £224. Work out Ryan's percentage profit.	
5 The probability that Nia hits the target is 0.6. The probability that Sam hits the target is 0.1. The two events are independent. Work out the probability that both Nia and Sam hit the target.	

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6 Factorise $4x^2 + 15x + 9$	
7 Change 3 m^2 to cm^2.	
8 A is the point (3, 3) and B is the point (5, 7). Find the equation of the perpendicular bisector of AB.	
9 (a) Show that $0.\dot{3}\dot{6} = \frac{4}{11}$ (b) Hence write $1.\dot{3}\dot{6}$ as a mixed number in its simplest form.	
10 The diagram shows a sector of a circle of radius 15 cm. Work out the area of the sector. Give your answer in terms of π. The diagram is not drawn accurately. 	