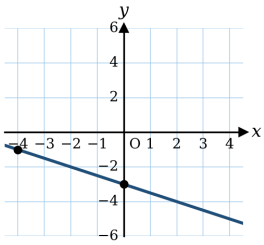
Day 265	A Tier 10-a-day
1 (a) Write 0.0023 in standard form. (b) Write 3.4×10^3 as an ordinary number.	
2 Triangle STU: ST = 13 cm, TU = 8 cm, SU = 6 cm. Triangle LMN: LM = 8 cm, MN = 6 cm, LN = 13 cm. Are the two triangles congruent? Give a reason for your answer.	
3 Two fair dice are thrown. The two scores are added together. Work out the probability that the sum is 4.	
4 Find the equation of the straight line shown. Give your answer in the form y = mx + c 	
5 A cylinder has radius 6 cm. It contains water to a depth of 15 cm. (Calculator) All the water is poured into an empty tank with a rectangular base 15 cm by 20 cm. Work out the depth of the water in the tank. Give your answer to 3 significant figures.	

Day 265	A Tier 10-a-day
6 a : b = 3 : 8 b : c = 4 : 1 (a) Work out the ratio a : b : c (b) a, b and c add up to 104. Work out the value of c.	
7 Expand and simplify (x + 4)(x + 4)(x + 5)	
8 The probability that Maya wins a game is 0.6. The probability that Dev wins a game is 0.8. The two events are independent. Work out the probability that at least one of them will win a game.	
9 A rectangle has length 29 mm and width 27 mm. Each measurement is correct to the nearest mm. Work out the upper bound for the perimeter of the rectangle.	
10 Ship A sails 22 km from a port on a bearing of 155°. Ship B sails 6 km from the same port on a bearing of 105°. (Calculator) Work out the distance between the two ships. Give your answer to 3 significant figures.	