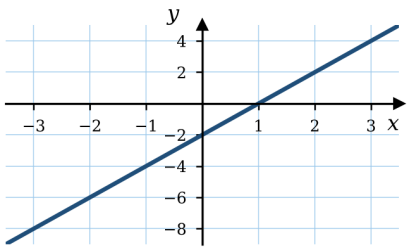
Day 222	B Tier 10-a-day
1 Here is a formula. $A = 3a^2$ Work out the value of A when a = 5	
2 The exchange rate is £1 = $1.3. (Calculator) (a) Change £250 to dollars. (b) Change $234 to pounds (£).	
3 A spinner has coloured sections. It is spun 100 times and lands on blue 55 times. What is the relative frequency of blue? Give your answer as a decimal.	
4 On a map, 1 cm represents 20 km. Two towns are 12 cm apart on the map. (a) Work out the real distance between the towns. (b) Write the scale of the map in the form 1 : n.	
5 In a bag of counters, the ratio of black to blue is 5 : 2. The ratio of blue to green is 8 : 7. Write down the ratio black : blue : green.	

Day 222 **B Tier 10-a-day**

6 The diagram shows a straight line.
(a) Work out the gradient of the line.
(b) Find the equation of the line.



7 Triangle XYZ is isosceles with XY = XZ.
Angle XYZ = 48°.
Work out the size of angle YXZ.

8 Factorise $x^2 + 4x - 5$

9 The length of a pencil is 14.3 cm, correct to 1 decimal place.
Write down the error interval for the length.
Use the letter L.

10 There are 3.7×10^5 fish in a lake.
The number doubles every day.
How many are there after 4 days?
Give your answer in standard form.