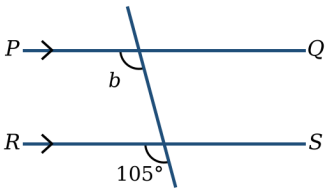
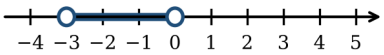
Day 299	B Tier 10-a-day
1 Here are the first four terms of a sequence. 2, 20, 200, 2000 (a) Write down the next two terms. (b) Describe the rule for continuing the sequence.	
2 Here are four digit cards. 2 1 3 9 Use all four cards to make the largest possible even number.	
3 In the diagram, PQ is parallel to RS. (a) Work out the size of angle b. (b) Give a reason for your answer. The diagram is not drawn accurately. 	
4 Solve $8 - 3x = 4x - 20$	
5 Two fair dice, numbered 1 to 6 and 1 to 8, are rolled. Work out the probability that both dice show the same number.	

Day 299	B Tier 10-a-day

6 A water tank is $\frac{3}{5}$ full.
12 litres of water are added.
The water tank is now $\frac{2}{3}$ full.
Work out the capacity of the water tank.

7 In a bag of counters, the ratio of yellow to black is 4 : 5.
The ratio of black to red is 5 : 4.
Write down the ratio yellow : black : red.

8 (a) Write down the inequality shown on the number line.
(b) Write down all the integers that satisfy the inequality.



9 Triangle ABC is isosceles with AB = AC = 6 cm. (Calculator)
The base BC = 6 cm.
Work out the size of angle ABC.
Give your answer correct to 1 decimal place.

10 P is directly proportional to n.
When n = 12, P = 18.
Find the value of n when P = 21.