Day 70	B Tier 10-a-day
1 Here are four digit cards. 1 4 8 3 Use all four cards to make the largest possible number. Work out the difference between the largest and smallest possible numbers.	
2 A machine exerts a force of 40 N and causes a pressure of 5 N/m^2. Work out the area in contact with the ground.	
3 What fraction of £1.50 is 40p? Give your answer in its simplest form.	
4 A straight line has equation $y = 5x + 4$ (a) Write down the gradient of the line. (b) Write down the equation of a line that is parallel to this line and passes through the point (0, 6).	
5 Sam stands 55 m from the base of a tower on level ground. (Calculator) The angle of elevation of the top of the tower is 20°. Work out the height of the tower. Give your answer correct to 1 decimal place.	

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6 (a) Priya scores 12 out of 125 in a quiz. Write this as a percentage. (b) Write £1.20 as a percentage of £20.	
7 A lorry leaves at 2:10 pm. It travels 300 km at an average speed of 60 km/h. At what time does it arrive?	
8 An isosceles trapezium has parallel sides of length 37 cm and 13 cm. Each sloping side is 15 cm long. (a) Work out the perpendicular height of the trapezium. (b) Work out the area of the trapezium.	
9 A cyclist travels at 80 km/h for 0.5 hours and then at 36 km/h for 1.5 hours. Work out its average speed for the whole journey.	
10 (a) Write down the inequality shown on the number line. (b) Write down all the integers that satisfy the inequality.  	