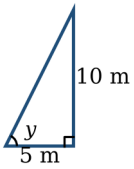
Day 189	B Tier 10-a-day
1 Write 2553.6262 (a) correct to 1 decimal place, (b) correct to 2 significant figures.	
2 In triangle PQR, PQ = 17 m, QR = 9 m and angle PQR = 52°. (Calculator) Work out the area of the triangle. Give your answer correct to 1 decimal place.	
3 A hire company charges £30 plus £10 for each day a van is hired. (a) Work out the total cost for 6 days. (b) The total cost is £130. Work out the number of days.	
4 Triangle ABC has angles of 60° and 75°, and a side of 7 mm between them. Triangle DEF has angles of 75° and 60°, and a side of 7 mm between them. Are the two triangles congruent? Give a reason for your answer.	
5 On a map, 1 cm represents 0.2 km. A lake is 17.5 cm long on the map. Work out the real length of the lake.	

Day 189	B Tier 10-a-day
6 Work out the size of angle y. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately.  	
7 Write these numbers in order of size. Start with the smallest. 1.8×10^{0}, 150, 6.4×10^{-2}, 0.00049	
8 Solve the simultaneous equations $x - 4y = -15$ $2x + 2y = 20$	
9 The probability that Dev wins a game of chess is 0.25. Work out the probability that Dev does not win a game of chess.	
10 Here is an iteration formula. $x_{n+1} = \sqrt{4x_n + 8}$ $x_0 = 2$ (a) Work out x_1 (b) Work out x_2. Give your answer correct to 3 decimal places. (Calculator)	