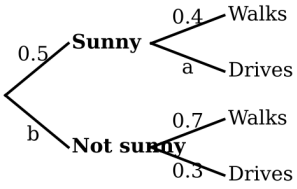
Day 159	A Tier 10-a-day
1 A television costs £400 plus VAT at 20%. In a sale, the price including VAT is reduced by 25%. Work out the sale price of the television.	
2 Work out $4\frac{4}{5} \times 3\frac{1}{3}$ Give your answer as a mixed number in its simplest form.	
3 A jug holds 15000 cm^3 of water. Write this volume in litres.	
4 A straight line passes through the points (3, 5) and (5, 11). Find the equation of the line.	
5 (a) Change 0.8 m^2 to cm^2. (b) Change 1,250 mm^2 to cm^2.	

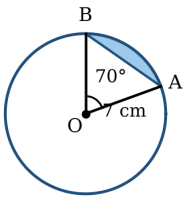
Day 159	A Tier 10-a-day

6 The graph of y = f(x) has a maximum point at (0, −4).
Write down the coordinates of the turning point of the graph of
(a) y = f(−x)
(b) y = f(x) − 2

7 The tree diagram shows probabilities for two events.
(a) Work out the values of a and b.
(b) Work out the probability of sunny and walks.



8 The diagram shows a circle with centre O and radius 7 cm.
Angle AOB = 70°. (Calculator)
Work out the area of the shaded segment.
Give your answer to 3 significant figures.



9 Cara and Jack each invest £4000 for 3 years. (Calculator)
Cara's account pays 5% simple interest per year.
Jack's account pays 5% compound interest per year.
Work out how much more interest Jack earns than Cara.

10 Rationalise the denominator of $\frac{116}{6+\sqrt{7}}$

Give your answer in the form $a + b\sqrt{c}$ where a and b are integers.