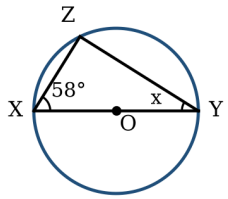
Day 69 **A Tier 10-a-day**

1 A shop sells rice in 3 different sizes.
Small bag: 200 g for £1.00
Medium bag: 250 g for £1.05
Large bag: 400 g for £1.65
Which bag is the best value for money? You must show your working.

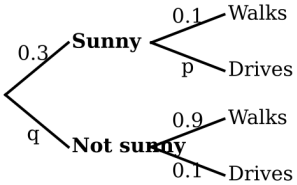
2 XY is a diameter of the circle.
Angle YXZ = 58°.
Work out the size of angle x.
Give a reason for each step of your working.

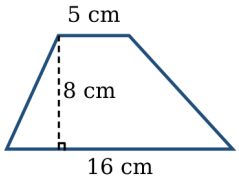


3 Work out $5\frac{1}{3} \times 1\frac{3}{8}$
Give your answer as a mixed number in its simplest form.

4 Angle XYC is drawn on a piece of paper.
A point P moves so that it is always the same distance from line YX and line YC.
Describe the locus of P.

5 The tree diagram shows probabilities for two events.
(a) Work out the values of p and q.
(b) Work out the probability that Omar walks to work.



Day 69	A Tier 10-a-day
6 The diagram shows a trapezium. Work out the area of the trapezium. The diagram is not drawn accurately.  	
7 Rationalise the denominator of $\frac{8}{\sqrt{7}}$ Give your answer in its simplest form.	
8 $f(x) = -3x - 2$ $g(x) = x^2 + 8$ (a) Find f(2) (b) Find fg(x). Give your answer in its simplest form.	
9 A club has 50 members in junior, 40 in intermediate and 80 in senior. A stratified sample of 17 members is to be taken. Work out how many members should be chosen from intermediate.	
10 Make x the subject of $y = \frac{2x - 5}{3x + 4}$	