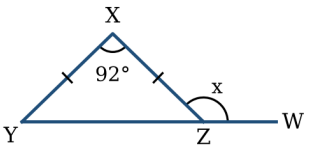
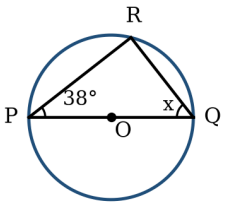
Day 36 **A Tier 10-a-day**

1 XYZ is an isosceles triangle with XY = XZ.
YZW is a straight line.
Angle YXZ = 92°.
Work out the size of angle x.
The diagram is not drawn accurately.



2 The number of members of a club was 360 and is now 234.
Work out the percentage decrease.

3 PQ is a diameter of the circle.
Angle QPR = 38°.
Work out the size of angle x.
Give a reason for each step of your working.



4 Solve $x^2 + 8x - 6 = 0$
Give your solutions correct to 2 decimal places.
(Calculator)

5 30% of a number is 72. (Calculator)
Work out 45% of the same number.

Day 36	A Tier 10-a-day
6 A van hire company charges a fixed fee of £15 plus £15 for each day. (a) Write a formula for the total cost, £C, after d days. (b) Maria pays £180 in total. Work out the number of days.	
7 A spinner can land on red, blue or green. P(red) = 0.55 and P(blue) = 0.25. (a) Work out the probability that it lands on red or blue. (b) Work out the probability that it lands on green.	
8 The line L has equation $y = -2x + 5$ Find the equation of the line that is parallel to L and passes through the point $(2, -2)$.	
9 Oscar invests £13,000 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £14,332.50. Work out the annual rate of interest.	
10 A crate exerts a force of 10 N on the floor. The area in contact with the floor is 0.25 m^2. Work out the pressure on the floor in N/m^2.	