



ABC is an isosceles triangle.

$$AB = BC$$

ACD is a straight line.

$$\text{Angle BCD} = x^\circ$$

Prove angle ABC =  $(2x - 180)^\circ$

Write 32 in the form  $8^n$

$$f(x) = \frac{kx + 2}{4}$$

$$g(x) = 2x + 5$$

$$\text{Given } fg(4) = -9.25$$

Work out the value of k

How many odd numbers greater than 40,000 can be created using these digits

1 2 6 7 8

using each digit only once.