Corbettmaths

The lengths of 200 fish in a pond, *l* centimetres, are recorded below.

Length, l	Frequency
0 < l ≤ 4	36
4 < l ≤ 6	40
6 < l ≤ 8	48
8 < l ≤ 12	44
12 < l ≤ 20	32
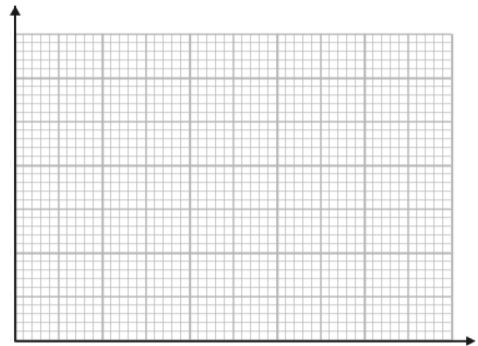
Draw a histogram for this data.

Frequency Density

length

Work out an estimate for the fraction of the fish that have a length between 5cm and 11cm.

The function f is such that
$f(x) = kx + 3$

The function g is such that
$g(x) = 2x - 4$

Given that $gf(2) = 34$

Work out the value of k

Find the coordinates of the points where the circle x² + y² = 8 and the line y = 2x + 2 intersect.