

23 **C** is a circle with centre $(0, 0)$

L is a straight line.

The circle **C** and the line **L** intersect at the points P and Q .

The coordinates of P are $(5, 10)$

The x coordinate of Q is -2

L has a positive gradient and crosses the y -axis at the point $(0, k)$

Find the value of k .

$k = \dots\dots\dots$

(Total for Question 23 is 5 marks)