## Question 2

- A point *X* has co-ordinates (-1, 6) and the slope of the line *XC* is  $\frac{1}{7}$ .
- (a) Find the equation of XC. Give your answer in the form ax + by + c = 0, where  $a, b, c \in \mathbb{Z}$ .



(b) C is the centre of a circle s, of radius 5 cm. The line l: 3x + 4y - 21 = 0 is a tangent to s and passes through X, as shown. Find the equation of one such circle s.

