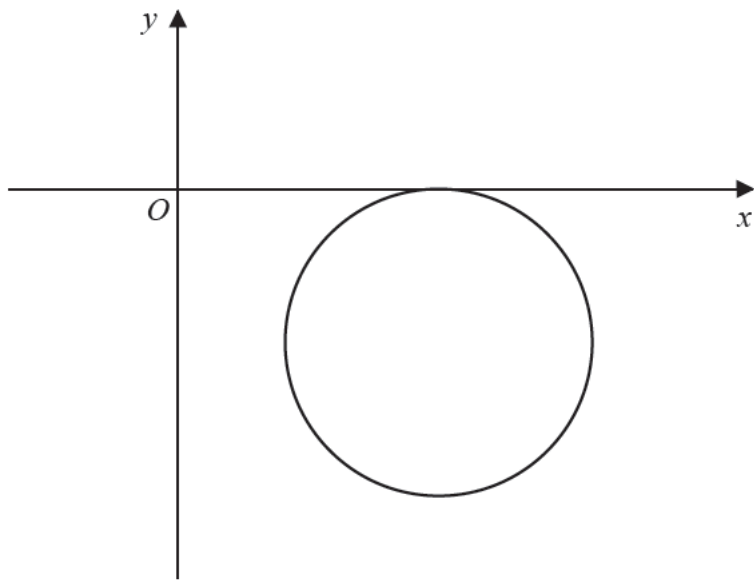


8.

**Figure 4**

A circle with centre  $(9, -6)$  touches the  $x$ -axis as shown in Figure 4.

(a) Write down an equation for the circle.

**(3)**

A line  $l$  is parallel to the  $x$ -axis.

The line  $l$  cuts the circle at points  $P$  and  $Q$ .

Given that the distance  $PQ$  is 8

(b) find the two possible equations for  $l$ .

**(4)**