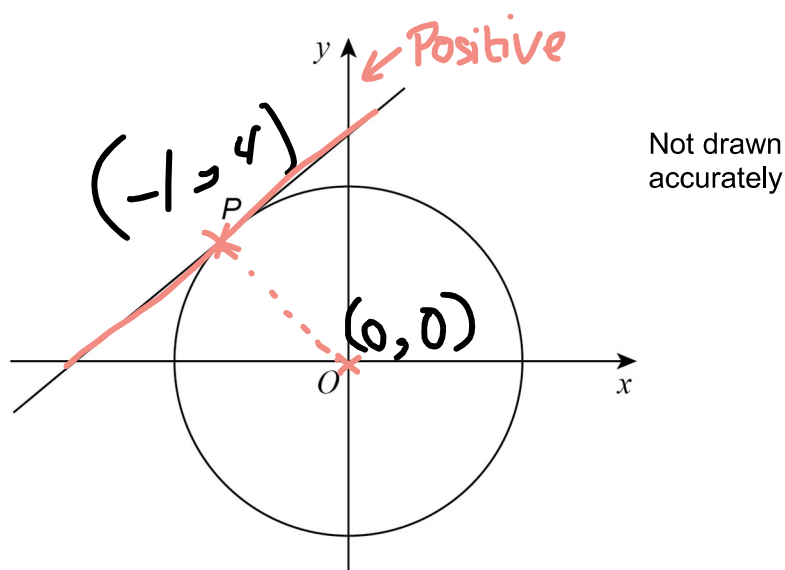


27

$P(-1, 4)$  is a point on a circle, centre  $O$   $\leftarrow$  origin



Work out the equation of the tangent to the circle at  $P$ .

Give your answer in the form  $y = mx + c$

[4 marks]

$$y = mx + c \quad -\frac{4}{1} \Rightarrow -4$$

$m = \frac{\Delta y}{\Delta x}$  Perpendicular = negative reciprocal.

$$y = \frac{1}{4}x + c$$

$$4 = -0.25 + c$$

$$c = 4.25$$

Answer  $y = \frac{1}{4}x + 4.25$

Turn over ►

