



Josie writes down the number a "googol."
She has written the digit one followed by 100 zeros.

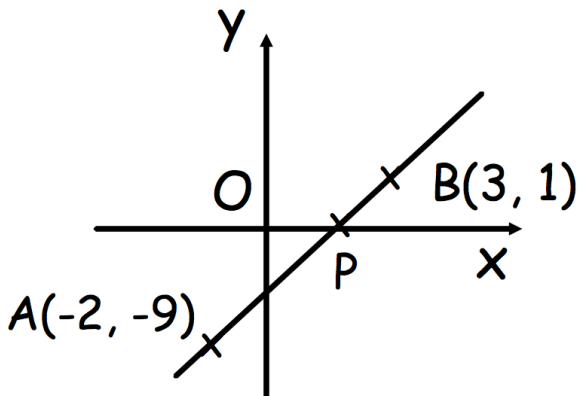
Write a googol in standard form.

$$(3y + 5)(y - 2) + ay + b \equiv 3y^2 + y - 4$$

Find the values of a and b

A straight line passes through A(-2, -9) and B(3, 1).

The line crosses the x-axis at the point P.



Find the coordinates of P

Find the equation of the line perpendicular to AB that passes through P

Write in the form $a\sqrt{b}$

$$\sqrt{27} + \frac{18}{\sqrt{3}}$$