

Answer on Question #46122 – Math – Algebra

We have given line:

(-2; -2) and (0; 0) — points on the line.

Equation of the given line :

$$y - y_1 = \frac{y_2 - y_1}{x_2 - x_1} (x - x_1)$$

So, $y=x$ – equation of the given line.

A) equation of the parallel line will have form like this:

$y=x+C$, Where C – constant

For example:

$$y = x+5$$

$$y=x+22$$

$$y = x+65$$

So we have infinite number of parallel lines

B)

Equation of the line that is perpendicular to the line:

$$y = -x + C$$

For example:

$$y = -x+5$$

$$y=-x+44$$

$$y=-x+625$$

In this case we also have infinite number of perpendicular lines.