Line p contains points A(0,-9) and B(-1, 2) line q is parallel to line p line r is perpendicular to line q what is the slope of line r?

Solution:

Let form the equation of the line p. We can use the next formula:

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

$$\frac{y+9}{11}=\frac{x}{-1} => -y-9=11x => y=-11x-9$$

It's known that line q is parallel to line p, so the equation of line q will be the next: y=-11x+b, where the b is constant.

Also it's known, that the line r is perpendicular to line q, so the equation of line r will be the next: $y=\frac{1}{11}x+c$, where c is constant.

So, we can see, that the slope of line r is 1/11

Answer: 1/11