Answer on Question #60406 – Math – Analytic Geometry

Question

Find the gradient of the straight line that passes through the points $(5, -3)$ and $(-2, 4)$.

Solution

The gradient of the linear function in one variable is equal to $k = \tan\varphi$, where φ is the angle between the given line and the positive direction of the x-axis.

In this problem

$$k = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4+3}{-2-5} = -1.$$

Answer: -1.