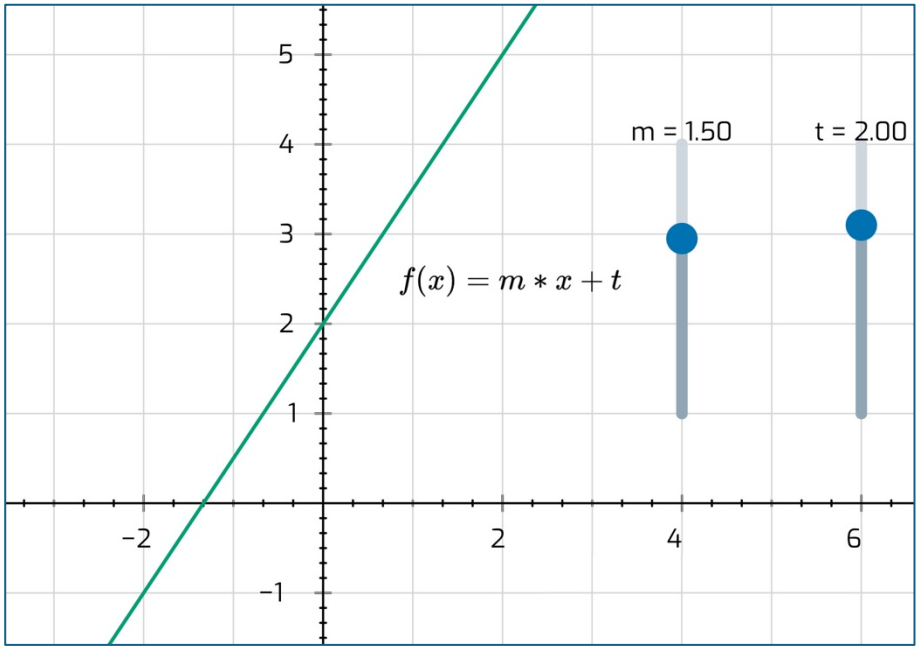
Graph of a Linear Function (1)

Construction

- Show grid and coordinate system.
- Under *Functions*, select *Slider* for the range -5 to 5, name it m and place it at the top right of the board.
- To the right of it, place another *Slider* t, also for the range -5 to 5.
- Under *Functions*, select f(x) *Function graph* and enter the function term $f(x) = m \cdot x + t$. Input in sketchometry: `m*x+t`
- Select under *Measure* in the toolbar *Text*. Then type $f(x) = m \cdot x + t$ and place the text next to the graph. sketchometry input: `$f(x)=m*x+t$`



Exploration

- Move the slider t and observe the graph. What do you notice? Take a note of your observation.
- Move the slider m and observe the graph. What do you notice? Take notes again. Describe the difference to the effect of the slider t.
- Choose the value -2 for t. What value must m have so that the graph intersects the x-axis exactly at $x = 4$? Note the result with a sketch.