Constant Rate and Linear Equation

1. a) Susan can type 4 pages of text in 10 minutes. Assuming she types at a constant rate, write the linear equation that represents the situation.

b) The table of values below represents the number of pages that Anne can type, y, in a few selected x minutes. Assume she types at a constant rate.

Minutes (x)	Pages Typed (y)
3	2
5	$\frac{10}{3}$
8	$\frac{16}{3}$
10	$\frac{20}{3}$

Who types faster? Explain.

Constant Rate and Linear Equation

1. a) Susan can type 4 pages of text in 10 minutes. Assuming she types at a constant rate, write the linear equation that represents the situation.

Let y represent the total number of pages Susan can type in x minutes. We can write $\frac{y}{x} = \frac{4}{10}$ and $y = \frac{2}{5}x$.

b) The table of values below represents the number of pages that Anne can type, y, in a few selected x minutes. Assume she types at a constant rate.

Minutes (x)	Pages Typed (y)
3	2
5	$\frac{10}{3}$
8	$\frac{16}{3}$
10	$\frac{20}{3}$

Who types faster? Explain.

Anne types faster. Using the table, we can determine that the slope that represents Anne's constant rate of typing is $\frac{2}{3}$. The slope or rate for Nicole is $\frac{2}{5}$. When you compare the slopes, you see that $\frac{2}{3} > \frac{2}{5}$.