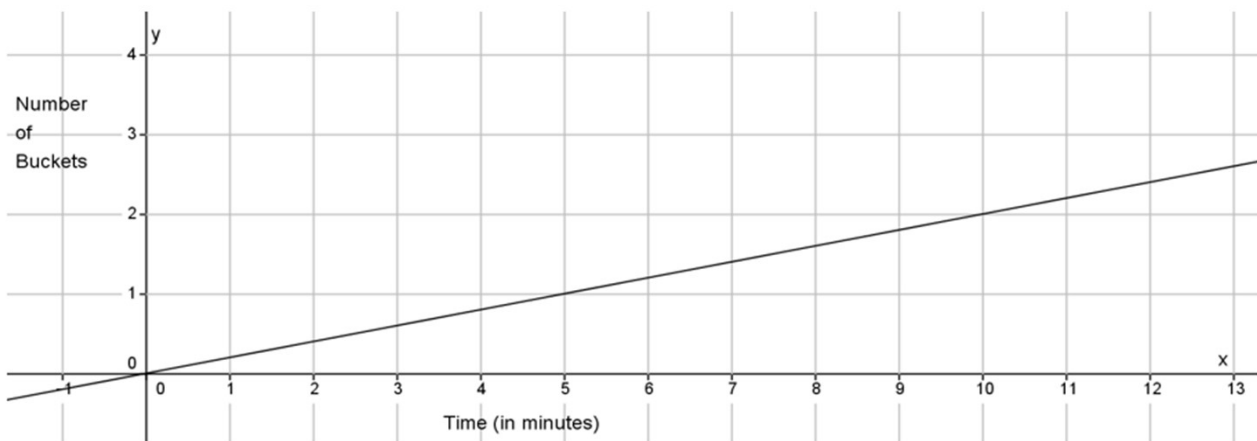


Constant Rate and Linear Equation

1. Water flows out of Pipe A at a constant rate. Pipe A can fill 3 buckets of the same size in 14 minutes. Write a linear equation that represents the situation.

2. The figure below represents the rate at which Pipe B can fill the same-sized buckets.



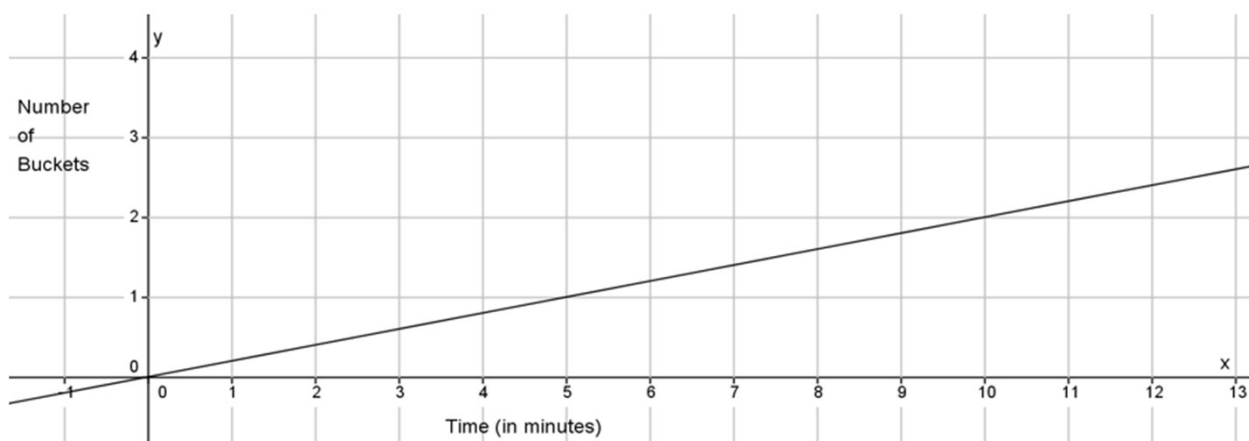
Which pipe fills buckets faster? Explain.

Constant Rate and Linear Equation

1. Water flows out of Pipe A at a constant rate. Pipe A can fill 3 buckets of the same size in 14 minutes. Write a linear equation that represents the situation.

Let y represent the total number of buckets that Pipe A can fill in x minutes. We can write $\frac{y}{x} = \frac{3}{14}$ and $y = \frac{3}{14}x$.

2. The figure below represents the rate at which Pipe B can fill the same-sized buckets.



Which pipe fills buckets faster? Explain.

Pipe A fills the same-sized buckets faster than Pipe B. The slope of the graph for Pipe B is $\frac{1}{5}$, and the slope or rate for Pipe A is $\frac{3}{14}$. When you compare the slopes, you see that $\frac{3}{14} > \frac{1}{5}$.

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