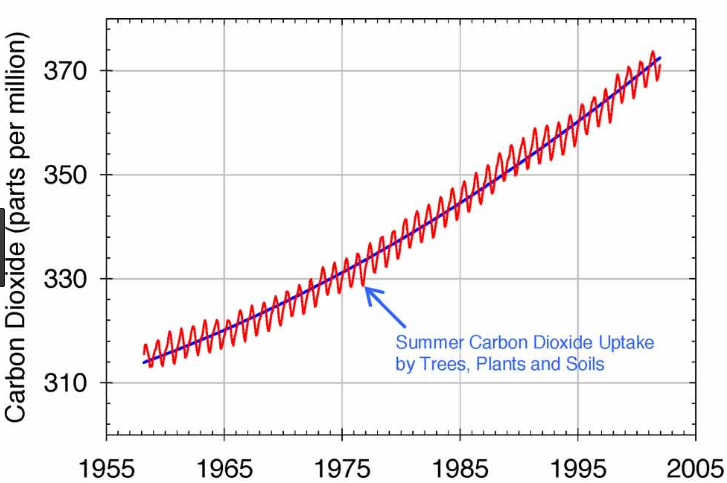
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| NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_ | **Algebra** |
| Quiz4-8 PRACTICE | **DATE: Thursday, June 15, 2017** |

A graph of years and carbon dioxide in atmosphere (in parts per million) is below:



You draw a trendline and get the equation **y= 1.25x + 255 where x is years since 1900.**

What does the slope mean in real terms?

What does the y intercept mean?

Simulation:

1. There are 10 students in this room. Im going to randomly call out students one at a time to play a game (Deal or no deal). On average, how many people will I need to pick until I call on you? Conduct a simulation with 20 trials. Write your results from your trials below.

Using your simulation:

1. How many people on average did it take so that you are called?
2. If we only play 3 times, what is chance you get to play?
3. Sprite has a contest where 1 in 6 bottles wins. You are going to buy bottles until you win. How many bottles on average will it take to get a winner.

Conduct a simulation with 20 trials. Write your results from your trials below.

Using your simulation:

* 1. How many bottles on average will it take to get a winner?
  2. What is the probability that you will only need to buy 2 bottles or less?