Q1 Benchmark
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# The Big Bake Sale 

## INTRO

Maya decides with the help of her friend Claire and their principal Lehmann that a fundraiser will be held in the gym. The whole school is allowed to participate in the activity. The amount of money being donated (starting point) is being donated to the total amount of money that needs to be raised for the

## RISING ACTION

Every cookie is 15 dollars charged toward the consumer per day (slope) will be used for a free field trip. On the second day the bake sale gets hit with a big donation of 400 dollars (starting point) from the assistant principal. The equation for the following is below.

| Independent Variable <br> (x) <br> (\# days) | Calculations | Dependent Variable (y) <br> (total money raised \$) |
| :---: | :---: | :---: |
| 2 | $30(2)+400$ | 460 |
| 4 | $30(4)+400$ | 520 |
| 6 | $30(6)+400$ | 580 |
| 8 | $30(8)+400$ | 640 |

Equation $y=30(x)+400$
Slope $=30$, which represents the number of cookies sold per day $\mathbf{Y}$-intercept $=$ The $\mathbf{y}$ intercept and starting point is 400, and this is representing the donation

## Graph:



## CLIMAX

Oh no! The number of cookies being sold per day (slope) started to decrease. Claire decided to decrease the amount of money per cookie to 10 dollars (slope). The 400 dollars in donation money is being given to the principal. Maya and Claire are subtracting that by how much money they are making to see how much they have now. The equation for the following is below. Only 5 cookies were sold at a time.

| Independent variable <br> X <br> \# of days cookies are <br> sold) | Calculations | Dependent variable <br> $(y)$ <br> Amount of money after |
| :---: | :---: | :---: |
| 5 | $400-5(10)$ | 350 |
| 2 | $400-2(10)$ | 380 |
| 3 | $400-3(10)$ | 370 |
| 4 | $400-4(10)$ | 360 |

Equation: $y=400-10(x)$
Slope $=10$, which represents the number of cookies per day
Y -intercept (starting point) $=400$, and this is representing the donation money


## FALLING ACTION

Hooray!
The bake sale is thriving! The amount of money raised is 1200 dollars. Cookies are being sold for 5 dollars instead of 10 now. This is because we have finally reached enough money to afford the field trip! Total money raised after the field trip goal $(\mathrm{y})$ will be split between the teachers. The equation to support the following is below.

| X Intercept | Calculations | Y Intercept <br> Amount of total money <br> raised after the goal |
| :---: | :---: | :---: |
| 10 | $1200-5(10)$ | 1150 |
| 20 | $1200-5(20)$ | 1100 |
| 30 | $1200-5(30)$ | 1050 |


| 40 | $1200-5(40)$ | 1000 |
| :---: | :---: | :---: |

Equation: $y=1200-5(x)$ Slope $=5$, which represents monnet for the donuts
Y-intercept $=1200$ which represents the goal reached


