**Dissect and Apply**

**Complete the table by placing a letter next to the correct definition.**

|  |  |
| --- | --- |
| **The part of the equation that stays the same\_\_\_\_\_\_****The inclination of a line\_\_\_\_\_\_****The point where the line crosses the y axis\_\_\_\_\_\_****The part of the equation that is subject to change\_\_\_\_\_****Slope intercept equation\_\_\_\_\_\_\_\_\_\_\_****Equation of a line\_\_\_\_\_\_\_\_****A function when plotted forms a straight line\_\_\_\_\_\_****A quantity measured against another quantity\_\_\_\_\_\_** | **Linear Equation-A****Y=mX+b-B****Rate-C****Constant-D****Intercept-E****Variable-F****Slope-G****Y=Mx-H** |

**\*Use this video link as a reference:** <https://learnzillion.com/lessons/2468-write-linear-equations-based-on-story-problems>

**Question # 1**

A taxi ride has a flat rate call out fee of $3.50 and a charge of $1.50 for every kilometer travelled.

a)   Write an equation to represent the taxi fee

b)   How much would you expect to pay for a trip of 15 km

c) Use the graphing calculator to sketch the graph of this equation.

 D) Use complete sentences to dissect the equation above:

What is your independent variable?

What is your dependent variable?

What is your intercept?

What is your slope?

What will remain constant in the equation?

**Question # 2**

An electrician charges an emergency call out fee of $90. He also charges $20 for every 15 minutes spent on the job.

a)   Write an equation to represent the electrician fee.

b)  What would you expect to pay for a 45 min job?

c) Use the graphing calculator to sketch the graph of this equation.

 D) Use complete sentences to dissect the equation above:

What is your independent variable?

What is your dependent variable?

What is your intercept?

What is your slope?

What will remain constant in the equation?