**What is the best internet deal?**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_

Subject Ms. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Target:** Today I am comparing cost of different internet providers so that I can decide which is the most cost efficient. I know I’ve got it when I can make a claim and support which internet provider is the best.

**Task # 1:** List 3 things that you expect from a good internet provider. Make sure to explain why these things are important to you.



**Task # 2:** Using the [2018-Broadband-Website Data](https://docs.google.com/spreadsheets/d/1kvwvr3Uy64A2B4RzENhF0Lb14Kgp-RGX9NIyVdTuVwY/edit?usp=sharing) spreadsheet, you will need to choose a state in which you would like to compare the cost of different internet providers. Each internet provider should be located in the **SAME** state.

Focus on columns A, B, D, F, and H.

* Column A-Provider
* Column B- State
* Column D- Technology
* Column F- Upload Bandwidth Mbps
* Column H-Monthly Charge

Using the “Estimate price per month” and “upload rate” (used for friendly number purposes) calculate and compare the unit price for at least 5 internet providers in the state of your choice.

(Table on Next Page)

You can use the table below to help you organize your information:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Internet Broadband Cost Data | | | | |
| Name of Provider | State | Technology | Upload Bandwidth (Mbps) | Monthly Charge |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Task # 3:** How can you use the data you compiled in the table above to help you decide which internet provider is the best to give your business to? In 2-3 sentences describe what you think you will need to do.

**Task #4:** Find which company provides the best service by finding the unit price. Make sure that you are using the equation for constant rate of proportionality.

Constant rate of proportionality: k = y/x.

Identify the x: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

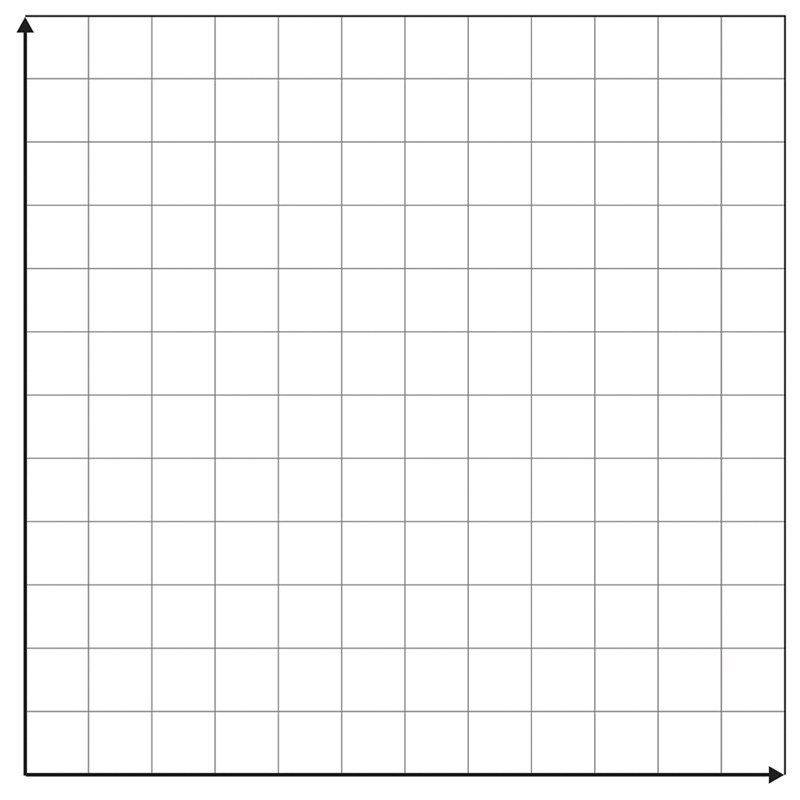
Identify the y: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| Internet Broadband Cost Data | | | |
| Name of Internet Provider | X | Y | K |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  |  |
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**Task #5:**

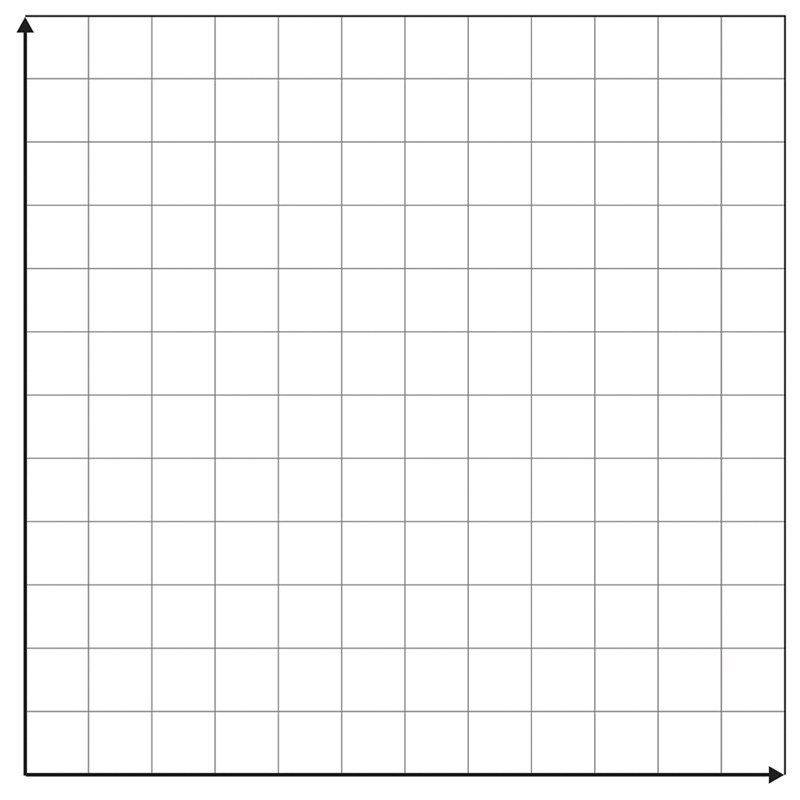
**Part A:** Now that you have found the unit price for each of the internet providerscreate a graph to show the relationship between the cost per month and the upload speed.

**Part B:** Using the graph you made, write an equation for the line in slope-intercept form.



Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task #6:** The internet provider has a one time installation fee of $35. Create a graph and an equation that represents the total cost for the internet service provided.



Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task #7:**

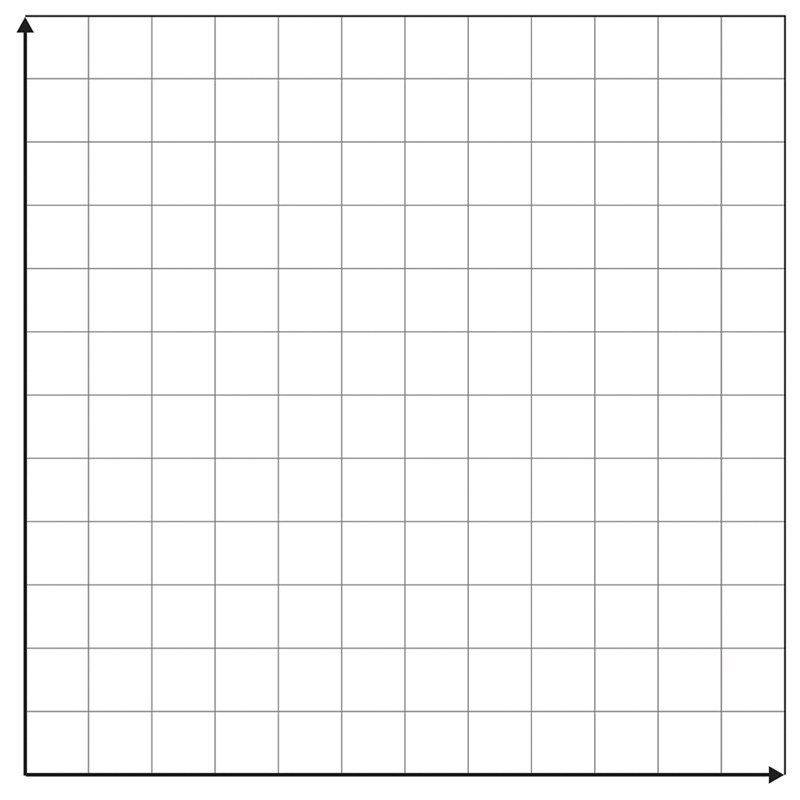
* Sammy has a job with Spectrum. He earns $7 per hour.
* Dave works at a Verizon. The table below shows how much money he earned every day last week.

|  |  |  |  |
| --- | --- | --- | --- |
| Dave’s Work Week | Monday | Wednesday | Friday |
| Time worked | 1.5 hours | 2.5 hours | 4 hours |
| Money earned | $12.60 | $21.00 | $33.60 |

a) Who would make more money for working 10 hours? Explain or show your work.

b) Draw a graph that represents the amount of money Dave would make (y) for working (x) number of hours. Assume he made the same hourly rate he was making last week.

c) Using the same coordinate graph, draw a graph representing how much money Sammy would make (y) for working (x) number of hours.



d) How can you see who makes more money per hour just by looking at the graphs? Explain

**Task #8:** Once you have completed your calculations, you will make an advertisement (written ad or commercial) promoting the internet provider service that you believe to give customers the best deal.

Advertisement **must include**: name, location, monthly cost, and unit price for upload speeds.