You can get the iPhone 6 for $\$ 200$ with a two-year contract on any of the following plans from Verizon, AT\&T or Sprint.

| Verizon |  |
| :---: | :---: |
| Data | Monthly Cost |
| 250 MB | $\$ 55$ |
| 500 MB | $\$ 70$ |
| 1 GB | $\$ 80$ |
| 2 GB | $\$ 90$ |
| 3 GB | $\$ 100$ |
| 4 GB | $\$ 110$ |
| 6 GB | $\$ 120$ |
| 8 GB | $\$ 130$ |
| 10 GB | $\$ 140$ |


| AT\&T |  |
| :---: | :---: |
| Data | Monthly Cost |
| 300 MB | $\$ 60$ |
| 1 GB | $\$ 85$ |
| 2 GB | $\$ 95$ |
| 4 GB | $\$ 110$ |
| 6 GB | $\$ 120$ |
| 8 GB | $\$ 130$ |
| 10 GB | $\$ 140$ |


| Data | Monthly Cost |
| :---: | :---: |
| 1 GB | $\$ 70$ |
| Unlimited | $\$ 80$ |

Or with T-Mobile you can get a $\$ 648$ phone and pay the following monthly fees without a contract:

| Data | Monthly Cost |
| :--- | :---: |
| 1 GB | $\$ 50$ |
| 3 GB | $\$ 60$ |
| 5 GB | $\$ 70$ |
| Unlimited | $\$ 80$ |

1. Pick a plan for your iPhone 6. Find your cost for the phone and service over time. Be sure to find the cost for the first several months, as well as after one, two and three years. You might find it useful to organize the costs over time in the table below (we have started it for you).

| Months | 0 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost |  |  |  |  |  |  |  |  |  |  |  |  |

2. What math did you do to find your total cost after 12, 24 and 36 months? What math are you doing over and over again regardless of the number of months?
3. Write a rule that gives your cost for the phone after any number of months. Be sure to describe what each variable or number in your equation represents in this context.
4. Graph the cost of your phone over three years. Consider which variable belongs on which axis and how to set up the scales for each axis.

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5. Where do you see the monthly rate of your cell phone plan in your graph? Where do you see the cost of your phone?

## Should you pay full price for the phone with T - Mobile?

6. Compare the 3 GB plan with Verizon for $\$ 100$ per month with the 3 GB plan from T-Mobile for $\$ 60$ per month by graphing each plan on the grid below. Over time which is a better deal? Should you pay full price for the phone and get the lower monthly rate with T-Mobile? Or should you get the phone for $\$ 200$ and pay the higher monthly rate with Verizon? For what number of months is T-Mobile cheaper? At what number of months is Verizon cheaper?

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7. Which plan do you think is the best deal? What other factor are involved in determining the best deal and which carrier to use?

Source: http://time.com/7982/which-wireless-plan-is-cheapest/

