$\qquad$
Assignment
Date $\qquad$ Period $\qquad$

The students in Ms. Algebra's class decide to order t-shirts that advertise the walkathon. John obtains two different quotes for the cost of the shirts.

One Size Fits All charges $\$ 4$ per shirt.
You Draw It / We Print It charges $\$ 75$ plus $\$ 3$ per shirt.

1. For each company, write an equation John could use to calculate the cost for any number of $t$-shirts.

One Size Fits All $\qquad$ You Draw / We Print $\qquad$
2. Complete the table for both companies. Then on the same set of axes, graph both companies. Use a different color for each graph.

| Number <br> of Shirts | One Size <br> Fits All | You Draw <br> It... |
| :---: | :---: | :---: |
| 0 |  |  |
| 2 |  |  |
| 4 |  |  |
| 6 |  |  |
| 8 |  |  |
| 10 |  |  |
| 12 |  |  |
| 14 |  |  |
| 16 |  |  |
| 18 |  |  |
| 20 |  |  |


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| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. Which company do you think the class should buy shirts from? What factors influenced your decision?
4. For what number of t-shirts is the cost the same for both companies? Explain how you got your answer.

Name $\qquad$
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5. Generate a table and a graph for $y=5 x-2$. How is the graph of this equation different from the other graphs you made?

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


6. Generate a table and a graph of $y=-2 x+3$. How is the graph different from the other graphs you made?

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  |  |  | ${ }^{2}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 0 |  | 2 |  |  |  |  |
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7. Generate a table and write an equation for the graph below. How is this graph different from the other graphs you made?

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |



